


COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Division of Water Quality Programs
Ellen Gilinsky, Ph.D., Director

Subject: Guidance Memo No. 03-2011, Amendment 1 - Implementation Guidance for Modification of the General VPDES Permit for Concrete Products Facilities (formerly for Ready-Mixed Concrete Plants) VAG11

To: Regional Directors

From: Ellen Gilinsky, Ph.D., Director 

Date: March 8, 2006

Copies: Deputy Regional Directors, Regional Water Permit Managers, Rick Weeks and Kyle Winter

Summary:

This guidance memo amends Guidance Memo No. 03-2011, the implementation guidance for the reissuance of General Permit VAG11. On December 7, 2005, the State Water Control Board adopted amendments to the General VPDES Permit Regulation for Concrete Products Facilities (formerly for Ready-Mixed Concrete Plants), 9 VAC 25-193-10 et seq., which modified General Permit VAG11. These modifications became effective February 8, 2006, but did not change the expiration date of the general permit on September 30, 2008. Copies of the amended permit regulation, fact sheet, modified registration statement, modified general permit and other items are attached. The purpose of this guidance memo is to identify changes that have been made to the General Permit VAG11 and to provide DEQ staff with guidance on implementation of these changes.

Electronic Copy:

An electronic copy of this guidance in PDF format is available for staff internally on DEQNET, and for the general public on DEQ's website at <http://www.deq.virginia.gov/waterguidance/permits.html>.

Contact Information:

Please contact Valerie Rourke, Office of Water Permit Programs, at (804) 698-4158 or varourke@deq.virginia.gov with any questions regarding the application of this guidance.

Disclaimer:

This document is provided as guidance and, as such, sets forth standard operating procedures for the agency. However, it does not mandate any particular method nor does it prohibit any particular method for the analysis of data, establishment of a wasteload allocation, or establishment of a permit limit. If alternative proposals are made, such proposals should be reviewed and accepted or denied based on their technical adequacy and compliance with appropriate laws and regulations.

1. Background

Facilities under SIC Codes 3271 (concrete block and brick) and 3272 (concrete products, except block and brick) are similar to ready-mixed concrete plants (SIC Code 3273) in both the raw materials that they use and in the wastewater that they produce. However, the General VPDES Permit Regulation for Ready-Mixed Concrete Plants did not cover facilities under SIC Codes 3271 and 3272. Consequently, these facilities were required to apply for an individual VPDES permit at considerably greater expense to regulate their process wastewater discharges.

In May of 2005, DEQ proposed to the State Water Control Board (Board) amendment of the General VPDES Permit Regulation for Ready-Mixed Concrete Plants that would, among other things, expand the coverage under this general permit to include process wastewater discharges from facilities under SIC Codes 3271 and 3272. Following a 60-day public comment period and public hearing, the Board adopted the amended regulation on December 7, 2005. The amended regulation became effective on February 8, 2006. Changes to the regulation do not affect the expiration date of the permit which remains September 30, 2008.

2. Changes to the General Permit

In addition to notes added to the regulation indicating the dates of modification, the following are other changes made to the regulation:

- a. Added permit coverage for the discharges of process wastewater and/or storm water from concrete block and brick facilities (SIC Code 3271) and concrete products facilities, except block and brick (SIC Code 3272), in addition to coverage already provided for ready-mixed concrete facilities (SIC Code 3273). This change will allow facilities in SIC Codes 3271 and 3272 that are already regulated under the VPDES Permit Program for their process wastewater discharges and/or their storm water discharges the option of obtaining general permit coverage under this permit. It will also allow new facilities and facilities that require VPDES permit coverage in the future the same option.
- b. Changed the name of the regulation to “General Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulation for Concrete Products Facilities” and replaced the text “ready-mixed concrete plants” with “concrete products facilities” throughout the regulation. These changes reflect that all concrete products facilities are now eligible for coverage under this general permit.
- c. Changed the permit special condition B.4. under Part I as follows:

~~“There shall be no product mixing unit washout or truck washing activities conducted outside of the~~ All washdown and washout of trucks, mixers, transport buckets, forms or other equipment shall be conducted within designated washdown and washout areas. All washout/washdown water shall be collected for recycle or treated prior to discharge.”

This change was made for consistency with EPA's "concrete products facilities" requirement in their Industrial Storm Water General Permit. The list in the previous permit only covered ready-mixed concrete plants.

- d. Changed the permit special condition B.6. under Part I by adding the word "domestic" before "sewage discharges" to clarify that domestic sewage discharges are not permitted under this general permit.

Existing production facilities of concrete block and brick (SIC Code 3271) and concrete products, except block and brick (SIC Code 3272) that have a process wastewater discharge presently authorized under an individual industrial VPDES permit, need not apply immediately for this general permit. These facilities may allow their individual VPDES permit to expire and apply for the general permit 180 days prior to expiration of the individual permit or have the individual permit voluntarily terminated and the general permit issued in its place. Because there is no refund for the difference of the application fee between the individual and general VPDES permits when the individual VPDES permit is terminated, most permittees will likely choose to allow the individual permit to expire and then replace it with the general permit. Note that individual permit coverage should be converted to general permit coverage prior to April 1st of the billing year to avoid having to pay the DEQ Annual Maintenance Fee for that billing year.

3. Changes to Previous Guidance

Guidance Memo No. 03-2011 for General Permit VAG11 still remains in effect except for the following changes:

- a. The Fee Form to be submitted with the registration statement for coverage under this general permit is no longer included among the attachments of the guidance memo. Always obtain the latest version of Fee Form available on the DEQnet at http://deqnet/documents/index.asp?path=/docs/water/Water_permit/fee_form.
- b. As of the date of this guidance, no on-line registration for this general permit exists. DEQ must receive a printed application, a copy of the fee form, and a copy of the check in the US Postal Service mail before processing can be completed.
- c. In 2004, modification of the Fee Regulation eliminated the prorating of general permit fees. The fee for this general permit (\$600.00) remains the same regardless of when a facility applies for coverage during the 5-year term of the permit. The fee must be paid in full at the time the registration statement is submitted for coverage under the general permit.
- d. Transmittal letters for the general permit registration statement and for issuance of general permit have been modified to eliminate language concerning on-line registration and to address facilities converting from individual VPDES permits to the general permit, respectively.

4. Changes to CEDS

Changes and updates to CEDS that are needed routinely and in response to recent amendments of the permit regulation, have been submitted to the CEDS Steering Committee for evaluation and prioritization. Once these changes and updates become effective and/or are functional, the OWPP will provide further notice and CEDS implementation guidance, as needed, to the Regional Water Permit Staff.

ATTACHMENTS

- A. Modified General VPDES Permit Regulation
- B. Fact Sheet
- C. Modified Registration Statement and Instructions
- D. DEQ FAQ (Frequently Asked Questions) Sheet
- E. Modified General VPDES Permit
- F. Modified Example Registration Statement Transmittal Letter
- G. Modified Example Transmittal Letter for Issuing General Permit Coverage

ATTACHMENT A

Modified General VPDES Permit Regulation

9 VAC 25-193 - GENERAL VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM (VPDES) PERMIT REGULATION FOR CONCRETE PRODUCTS FACILITIES

[Adopted: June 19, 2003 - Effective: October 1, 2003; Amendment Adopted: December 7, 2005 - Effective: February 8, 2006]

9 VAC 25-193-10. Definitions.

The words and terms used in this chapter shall have the meanings defined in § 62.1-44.2 et seq. of the Code of Virginia (State Water Control Law) and 9 VAC 25-31 (VPDES Permit Regulation), unless the context clearly indicates otherwise, except that for the purposes of this chapter:

"Industrial activity" means facilities or those portions of a facility where the primary purpose is classified as:

- (1) Standard Industrial Classification (SIC) Code 3271 - Concrete Block and Brick (Office of Management and Budget (OMB) SIC Manual, 1987);
- (2) SIC Code 3272 - Concrete Products, Except Block and Brick; or
- (3) SIC Code 3273 - Ready-Mixed Concrete, including both permanent and portable plants.

These facilities are collectively defined as "Concrete Products Facilities".

9 VAC 25-193-20. Purpose.

This general permit regulation governs the discharge of process waste water and storm water associated with industrial activity from concrete products facilities classified as Standard Industrial Classification Codes 3271, 3272 and 3273, provided that the discharge is through a point source to surface waters.

9 VAC 25-193-30. Delegation of authority.

The director of the Department of Environmental Quality, or his designee, may perform any act of the board provided under this chapter, except as limited by § 62.1-44.14 of the Code of Virginia.

9 VAC 25-193-40. Effective date of the permit.

This general VPDES permit became effective on October 1, 2003, and it will expire on September 30, 2008. The general permit was amended on December 7, 2005, to add coverage for SIC Codes 3271 and 3272. The amendment became effective on February 8, 2006. With respect to a particular facility, this general permit shall become effective upon the facility owner's compliance with the provisions of 9 VAC 25-193-50 and the receipt of a copy of the general VPDES permit.

9 VAC 25-193-50. Authorization to discharge.

A. Any owner governed by this general permit is hereby authorized to discharge to surface waters of the Commonwealth of Virginia provided that the owner has filed with the department the registration statement described in 9 VAC 25-193-60, has filed the required permit fee, has complied or will comply with the effluent limitations and other requirements of 9 VAC 25-193-70, and has complied with the following conditions:

1. The owner shall not have been required to obtain an individual permit as may be required in 9 VAC 25-31-170 B 3; and
2. The owner shall not be authorized by this general permit to discharge to state waters specifically named in other board regulations or policies which prohibit such discharges.

B. Receipt of this general permit does not relieve any owner of the responsibility to comply with any other applicable federal, state or local statute, ordinance or regulation.

9 VAC 25-193-60. Registration statement.

A. Deadlines for submitting registration statement. The owner shall file a complete General VPDES Permit registration statement which shall serve as a notice of intent to be covered under the general VPDES permit for concrete products facilities. Any owner proposing a new discharge shall file a complete registration statement at least 30 days prior to the date planned for commencing operation of the concrete products facility. Any owner of an existing concrete products facility covered by an individual VPDES permit who is proposing to be covered by this general permit shall file a complete registration statement at least 180 days prior to the expiration date of the individual VPDES permit. Any owner of an existing concrete products facility not currently covered by a VPDES permit who is proposing to be covered by this general permit shall file a complete registration statement.

B. The owner shall submit a registration statement that contains the following information:

1. Name and location of the facility;
2. Name, mailing address, and telephone number of the facility owner;
3. Name, mailing address, and telephone number of the operator if different than owner;
4. Facility's Standard Industrial Classification (SIC) Code(s);
5. Nature of business at facility;
6. Indicate if the facility is proposed or existing; if the facility has a current VPDES and/or VPA Permit; and Permit Number(s) for any current VPDES and/or VPA Permits;
7. Description of the wastewater treatment or reuse/recycle system(s); indicate if there are any system(s) which operate in a "no discharge" mode;
8. If settling basins are used for treatment and control of process wastewater and commingled storm water, indicate the original date of construction, and whether these basins are lined with concrete or any other impermeable materials;
9. Indicate if there are vehicle/equipment maintenance activities on site. If yes, indicate if there is any process wastewater generated from these activities;
10. Indicate if this facility discharges noncontact cooling water from a geothermal unit or other system. If yes, description of the source of noncontact cooling water;
11. Indicate if any chemical additives are used in the geothermal or other system which discharges noncontact cooling water. If yes, list of chemical additive employed and its purpose; proposed schedule and quantity of chemical usage, and estimated concentration in the discharge; description of any wastewater treatment or retention during the use of the additives, if applicable; and a Material Safety Data Sheet (MSDS) and available aquatic toxicity information for each additive proposed for use;
12. Description of any measures employed to reclaim, reuse or disposal of the waste concrete materials;
13. A schematic drawing which shows the source(s) of water used on the property, the industrial operations contributing to or using water, and the conceptual design of the methods of treatment and disposal of wastewater and solids;
14. A topographic map, extending to at least one mile beyond property boundary, which shows the outline of the facility, the location of each of its existing and proposed intake and discharge points, and the locations of any wells, springs, and other surface water bodies;
15. Discharge outfall information, including outfall number(s), processes involved, estimated flow (gallons per day), receiving water bodies, and duration and frequency of each discharge (hours per day and days per week);
16. For a proposed facility that discharges storm water, indicate if a Storm Water Pollution Prevention Plan has been prepared.
17. The following certification: "I hereby grant to duly authorized agents of the Department of Environmental Quality, upon presentation of credentials, permission to enter the property where the treatment works is located for the purpose of determining compliance with or the suitability of coverage under the General Permit. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

The registration statement shall be signed in accordance with the requirements of 9 VAC 25-31-110.

9 VAC 25-193-70. General permit.

Any owner whose registration statement is accepted by the board will receive the following permit and shall comply with the requirements contained therein and be subject to all requirements of 9 VAC 25-31.

General Permit No: VAG11
Effective Date: October 1, 2003
Expiration Date: September 30, 2008
Modification Date: February 8, 2006

GENERAL PERMIT FOR CONCRETE PRODUCTS FACILITIES
AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE
ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act, as amended, and pursuant to the State Water Control Law and regulations adopted pursuant thereto, owners of concrete products facilities are authorized to discharge to surface waters within the boundaries of the Commonwealth of Virginia, except those specifically named in board regulations or policies which prohibit such discharges.

The authorized discharge shall be in accordance with this cover page, Part I—Effluent Limitations, Monitoring Requirements, and Special Conditions, Part II—Storm Water Management, and Part III—Conditions Applicable to All VPDES Permits, as set forth herein.

Part I. Effluent Limitations and Monitoring Requirements.

A. Effluent limitations and monitoring requirements.

1. Process wastewater.

During the period beginning on the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge process wastewater which may contain input from vehicle/equipment maintenance activities, and may be commingled with noncontact cooling water or storm water associated with industrial activity. Samples taken in compliance with the monitoring requirements specified below shall be taken at outfall(s).

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	
	Average	Maximum	Minimum	Frequency	Sample Type
Flow (MGD)	NL	NL	NA	⁽⁶⁾	Estimate
Total Suspended Solids (mg/l)	30	60	NA	⁽⁶⁾	Grab
pH (standard units)	NA	9.0 ⁽¹⁾	6.0 ⁽¹⁾	⁽⁶⁾	Grab
Total Petroleum Hydrocarbons ⁽²⁾ (mg/l)	NA	15	NA	1/3 Months	Grab
Total Residual Chlorine ⁽³⁾ (mg/l)	0.016	0.016	NA	⁽⁶⁾	Grab
Ammonia-N ⁽³⁾ (mg/l)	NA	NL	NA	⁽⁶⁾	Grab
Temperature ⁽⁴⁾ (°C)	NA	⁽⁵⁾	NA	⁽⁶⁾	Immersion Stabilization

NL = No limitation, monitoring required

NA = Not applicable

⁽¹⁾ Where the Water Quality Standards (9 VAC 25-260) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.

⁽²⁾ Total Petroleum Hydrocarbons limitation and monitoring are only required where a discharge contains process wastewater generated from the vehicle/equipment maintenance activities. Total Petroleum Hydrocarbons shall be analyzed using the Wisconsin Department of Natural Resources Modified Diesel Range Organics Method as specified in Wisconsin publication SW-141 (1995), or by EPA SW-846 Method 8015B (1996) for diesel range organics, or by EPA SW-846 Method 8270C (1996). If Method 8270C is used, the lab must report the combination of diesel range organics and polynuclear aromatic hydrocarbons.

⁽³⁾ Chlorine limitation and monitoring are only required where the discharge contains cooling water that is chlorinated. Ammonia monitoring is only required where the discharge contains cooling water that is disinfected using chloramines.

⁽⁴⁾ Temperature limitation and monitoring are only required where a discharge contains cooling water.

⁽⁵⁾ The effluent temperature shall not exceed a maximum 32°C for discharges to nontidal coastal and piedmont waters, 31°C for mountain and upper piedmont waters, 21°C for put and take trout waters, or 20°C for natural trout waters. No maximum temperature limit applies to discharges to estuarine waters.

For estuarine waters, nontidal coastal and piedmont waters, mountain and upper piedmont waters, and put and take trout waters, the effluent shall not cause an increase in temperature of the receiving stream of more than 3°C above the natural water temperature. For natural trout waters, the temperature of the effluent shall not cause an increase of 1°C above natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2°C per hour, except in the case of natural trout waters where the hourly temperature change shall not exceed 0.5°C.

Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point-source discharge.

⁽⁶⁾ For a facility that was covered by the previous general permit, and reduced monitoring was granted and compliance demonstrated, monitoring frequency shall be 1/quarter. In all other cases, monitoring frequency shall be 1/month in the first year of permit coverage. If the first year results demonstrate full compliance with the effluent limitations and the permittee receives authorization from the DEQ regional office, monitoring frequency shall be reduced to 1/quarter. Should the permittee be issued a warning letter related to violation of effluent limitations, a notice of violation, or be the subject of an active enforcement action, monitoring frequency shall revert to 1/month, upon issuance of the letter or notice or initiation of the enforcement action and remain in effect until the permit's expiration date. Reports of quarterly monitoring shall be submitted to the DEQ regional office no later than the 10th day of April, July, October, and January.

Part I. Effluent Limitations And Monitoring Requirements.

A. Effluent limitations and monitoring requirements.

2. Noncontact cooling water.

During the period beginning on the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge noncontact cooling water. Samples taken in compliance with the monitoring requirements specified below shall be taken at outfall(s).

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	
	Average	Maximum	Minimum	Frequency	Sample Type
Flow (MGD)	NL	NL	NA	(4)	Estimate
pH (standard units)	NA	9.0 ⁽¹⁾	6.0 ⁽¹⁾	(4)	Grab
Total Residual Chlorine ⁽²⁾ (mg/l)	0.016	0.016	NA	(4)	Grab
Ammonia-N ⁽²⁾ (mg/l)	NA	NL	NA	(4)	Grab
Temperature (°C)	NA	⁽³⁾	NA	(4)	Immersion Stabilization

NL = No limitation, monitoring required

NA = Not applicable

⁽¹⁾ Where the Water Quality Standards (9 VAC 25-260) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.

⁽²⁾ Chlorine limitation and monitoring are only required where the source of cooling water is chlorinated. Ammonia monitoring is only required where cooling water is disinfected using chloramines.

⁽³⁾ The effluent temperature shall not exceed a maximum 32°C for discharges to nontidal coastal and piedmont waters, 31°C for mountain and upper piedmont waters, 21°C for put and take trout waters, or 20°C for natural trout waters. No maximum temperature limit applies to discharges to estuarine waters. For estuarine waters, nontidal coastal and piedmont waters, mountain and upper piedmont waters, and put and take trout waters, the effluent shall not cause an increase in temperature of the receiving stream of more than 3°C above the natural water temperature. For natural trout waters, the temperature of the effluent shall not cause an increase of 1°C above natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2°C per hour, except in the case of natural trout waters where the hourly temperature change shall not exceed 0.5°C. Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point-source discharge.

⁽⁴⁾ For a facility that was covered by the previous general permit, and reduced monitoring was granted and compliance demonstrated, monitoring frequency shall be 1/quarter. In all other cases, monitoring frequency shall be 1/month in the first year of permit coverage. If the first year results demonstrate full compliance with the effluent limitations and the permittee receives authorization from the DEQ regional office, monitoring frequency shall be reduced to 1/quarter. Should the permittee be issued a warning letter related to violation of effluent limitations, a notice of violation, or be the subject of an active enforcement action, monitoring frequency shall be reverted to 1/month, upon issuance of the letter or notice or initiation of the enforcement action and remain in effect until the permit's expiration date. Reports of quarterly monitoring shall be submitted to the DEQ regional office no later than the 10th day of April, July, October, and January.

Part I. Effluent Limitations And Monitoring Requirements.

A. Effluent limitations and monitoring requirements.

3. Storm water associated with industrial activity - storm event monitoring.

During the period beginning on the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge storm water associated with industrial activity which does not combine with other process wastewaters or noncontact cooling water prior to discharge. Samples taken in compliance with the monitoring requirements specified below shall be taken at outfall(s).

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Maximum	Minimum	Frequency	Sample Type
Flow (MGD)	NL	NA	1/Year	Estimate ⁽¹⁾
Total Petroleum Hydrocarbons ⁽³⁾ (mg/l)	NL	NA	1/Year	Grab ⁽²⁾
Total Suspended Solids (mg/l)	NL	NA	1/Year	Grab ⁽²⁾
Total Recoverable Iron (mg/l)	NL	NA	1/Year	Grab ⁽²⁾
pH (standard units)	NL	NL	1/Year	Grab ⁽²⁾

NL = No limitation, monitoring required

NA = Not applicable

⁽¹⁾ Estimate of the total volume of the discharge during the storm event in accordance with the Operation and Maintenance Manual.

⁽²⁾ The grab sample shall be taken during the first 30 minutes of the discharge. If during the first 30 minutes it was impracticable, then a grab sample shall be taken during the first hour of discharge, and the permittee shall submit with the Discharge Monitoring Report a description of why a grab sample during the first 30 minutes was impracticable.

⁽³⁾ Total Petroleum Hydrocarbons shall be analyzed using the Wisconsin Department of Natural Resources Modified Diesel Range Organics Method as specified in Wisconsin publication SW-141 (1995), or by EPA SW-846 Method 8015B (1996) for diesel range organics, or by EPA SW-846 Method 8270C (1996). If Method 8270C is used, the lab must report the combination of diesel range organics and polynuclear aromatic hydrocarbons.

4. All storm water samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Specific storm event data shall be reported with the Discharge Monitoring Report in accordance with Part II A.

5. Reports of annual monitoring shall be submitted to the DEQ regional office no later than the 10th day of January of each year.

6. A quarterly visual monitoring shall be performed and recorded in accordance with Part II D.

B. Special conditions.

1. There shall be no discharge of floating solids or visible foam in other than trace amounts.
2. Except as expressly authorized by this permit, no product, materials, industrial wastes, or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, or storage of raw or intermediate materials, final product, byproduct or wastes, shall be handled, disposed of, or stored so as to permit a discharge of such product, materials, industrial wastes, or other wastes to surface waters.
3. Vehicles and equipment utilized during the industrial activity on a site must be operated and maintained in such a manner as to minimize the potential or actual point source pollution of surface waters. Fuels, lubricants, coolants, and hydraulic fluids, or any other petroleum products, shall not be disposed of by discharging on the ground or into surface waters. Spent fluids shall be disposed of in a manner so as not to enter the surface or ground waters of the state and in accordance with the applicable state and federal disposal regulations. Any spilled fluids shall be cleaned up to the maximum extent practicable and disposed of in a manner so as not to allow their entry into the surface or ground waters of the state.
4. All washdown and washout of trucks, mixers, transport buckets, forms or other equipment shall be conducted within designated washdown and washout areas. All washout/washdown water shall be collected for recycle or treated prior to discharge.
5. Any waste concrete and dredged solids from the settling basins shall be managed within a designated area, and any wastewaters including storm water generated from these activities shall be collected for recycle or treated prior to discharge.
6. No domestic sewage discharges to surface waters are permitted under this general permit.
7. For geothermal or other system which discharges noncontact cooling water, the use of any chemical additives, except chlorine, without prior approval is prohibited under this general permit. Prior approval shall be obtained from the DEQ Regional Office before any changes are made to the chemical usage in the geothermal or other system. Requests for approval of chemical use shall be made in writing and shall include the following information:
 - a. The chemical additive to be employed and its purpose;
 - b. The proposed schedule and quantity of chemical usage, and the estimated concentration in the discharge;
 - c. The wastewater treatment or retention (if any) to be provided during the use of the additive; and
 - d. A Material Safety Data Sheet (MSDS) and available aquatic toxicity information for each additive proposed for use.
8. Within 180 days after the date of coverage under this general permit, the permittee shall develop an Operations and Maintenance (O&M) Manual for the permitted facility. The O&M Manual shall include procedures and practices for the mitigation of pollutant discharges and for the protection of state waters from the facility's operations. The manual shall address, at a minimum, operations and maintenance practices for the wastewater treatment process units and chemical and material storage areas, solids management and disposal procedures, temporary and long-term facility closure plans, testing requirements and procedures, recordkeeping and reporting requirements and the duties and roles of responsible officials.

The permittee shall implement the O&M Manual procedures and practices as soon as possible but no later than 12 months after the date of coverage under this general permit. The manual shall be kept on site at the permitted facility and shall be made available to the department upon request.

For a facility that was covered by the previous permit, an O&M Manual was required to be developed and implemented for that facility. Within 90 days after the date of coverage under this general permit, the existing O&M Manual shall be reviewed and modified, as appropriate, to conform to the requirements of this permit. The existing O&M Manual shall continue to be implemented until the manual, if required, is revised and implemented.
9. If the concrete products facility discharges through a municipal separate storm sewer system to surface waters, the permittee shall, within 30 days of coverage under this general permit, notify the owner of the municipal separate storm sewer system of the existence of the discharge and provide

the following information: the name of the facility; a contact person and phone number; nature of the discharge; number of the outfalls; and the location of the discharge. A copy of such notification shall be provided to the department.

10. The permittee shall ensure that all basins and lagoons maintain a minimum freeboard of one foot at all times except during a 72-hour transition period after a measurable rainfall event. During the 72-hour transition period, no discharge from the basins and lagoons shall occur unless it is in accordance with this permit. Within 72 hours after a measurable rainfall event, the freeboard in all basins and lagoons shall return to the minimum freeboard of one foot. Should the one-foot freeboard not be maintained, the permittee shall immediately notify the DEQ Regional Office, describe the problem and corrective measures taken to correct the problem. Within five days of notification, the permittee shall submit a written statement to the regional office of explanation and corrective measures taken. In order to demonstrate compliance, the permittee shall conduct daily inspections while the facility is in operation and maintain an inspection log. The inspection log shall include at least the date and time of inspection, the weather data including the occurrence of a measurable rainfall event, the printed name and the handwritten signature of the inspector, the freeboard measurement in inches, a notation of observation made, and any corrective measures, if appropriate, taken. The log shall be kept onsite and be made available to the department upon request.

11. For treatment systems which operate only in a "no discharge" mode, there shall be no discharge of pollutants to surface waters from these systems except in the case of a storm event which is greater than a 25 year-24 hour storm event. The operation of these systems shall not contravene the Water Quality Standards (9 VAC 25-260), as adopted and amended by the board, or any provision of the State Water Control Law.

12. The permittee shall notify the department as soon as he knows or has reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit if that discharge will exceed the highest of the following notification levels:

(1) One hundred micrograms per liter (100 µg/l);

(2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(3) Five times the maximum concentration value reported for that pollutant in the permit application; or

(4) The level established by the board in accordance with 9 VAC 25-31-220 F.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit if that discharge will exceed the highest of the following notification levels:

(1) Five hundred micrograms per liter (500 µg/l);

(2) One milligram per liter (1 mg/l) for antimony;

(3) Ten times the maximum concentration value reported for that pollutant in the permit application; or

(4) The level established by the board in accordance with 9 VAC 25-31-220 F.

13. All settling basins used for treatment and control of process wastewater and commingled storm water that were constructed on or after February 2, 1998, shall be lined with concrete or any other impermeable materials prior to commencing operation.

14. Treated wastewater may be used on site for the purposes of dust suppression. Dust suppression shall be carried out as a best management practice but not a wastewater disposal method. No ponding or surface runoff shall occur as a result of such activity.

15. Compliance reporting under Part I A.

a. The quantification levels (QL) shall be as follows:

Effluent Characteristic	Quantification Level
Chlorine	0.1 mg/l

b. Reporting.

(1) Monthly Average. Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in Part I A shall be determined as follows: All concentration data below the QL listed in subsection 15 a of this subsection shall be treated as zero. All concentration data equal to or above the QL listed shall be treated as it is reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, for the month. This arithmetic average shall be reported on the DMR as calculated. If all data are below the QL then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the calculated concentration is <QL then report "<QL" for the quantity, otherwise use the calculated concentration.

(2) Daily Maximum. Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in Part I A shall be determined as follows: All concentration data below the QL listed in subdivision 15 a of this subsection shall be treated as zero. All concentration data equal to or above the QL shall be treated as reported. An arithmetic average of the values shall be calculated using all reported data, including the defined zeros, collected for each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the calculated concentration is <QL then report "<QL" for the quantity, otherwise use the calculated concentration.

(3) Any single datum required shall be reported as "<QL" if it less than QL listed in subdivision 15 a of this subsection. Otherwise the numerical value shall be reported.

Part II.

Storm Water Management.

A. Recording of results. For each discharge measurement or sample taken pursuant to the storm event monitoring requirements of this permit, the permittee shall record and report with the Discharge Monitoring Reports (DMRs) the following information:

1. The date and duration (in hours) of the storm event(s) sampled;
2. The rainfall measurements or estimates (in inches) of the storm event which generated the sampled discharge; and
3. The duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.

B. Representative discharge. When a facility has two or more exclusively storm water outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluent, the permittee may test the effluent of one of such outfalls and include with the DMRs an explanation that the quantitative data also applies to the substantially identical outfalls provided that the permittee includes a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each exclusively storm water outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g., low (under 40%), medium (40% to 65%) or high (above 65%)) shall be provided.

C. Sampling waiver. When a permittee is unable to collect storm water samples required in Part I A or other applicable sections of this permit within a specified sampling period due to adverse climatic conditions, the permittee shall collect a substitute sample from a separate qualifying event in the next period and submit these data along with the data for the routine sample in that period. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

D. Quarterly visual examination of storm water quality. The permittee shall perform and document a visual examination of a storm water discharge associated with industrial activity from each outfall, except discharges exempted below. The visual examination(s) must be made during daylight hours (e.g., normal

working hours), at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December.

1. Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examination shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previous measurable (greater than 0.1 inch rainfall) storm event. The required 72-hour storm event interval is waived where the preceding measurable storm event did not result in a measurable discharge from the facility. The required 72-hour storm event interval may also be waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. If no qualifying storm event resulted in discharge from the facility during a monitoring period, visual monitoring is exempted provided that the permittee document that no qualifying storm event occurred that resulted in storm water discharge during that quarter. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term.

2. Visual examination reports must be maintained onsite with the pollution prevention plan. The report shall include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

3. If the facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the examination data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (i.e., low (under 40%), medium (40 to 65%), or high (above 65%)) shall be provided in the plan.

4. When the permittee is unable to conduct the visual examination due to adverse climatic conditions, the permittee must document the reason for not performing the visual examination and retain this documentation onsite with the records of the visual examinations. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

E. Allowable nonstorm water discharges.

1. The following nonstorm water discharges are authorized by this permit provided the nonstorm water component of the discharge is in compliance with Part II E 2 below.

- a. Discharges from fire fighting activities;
- b. Fire hydrant flushings;
- c. Potable water including water line flushings;
- d. Uncontaminated air conditioning or compressor condensate;
- e. Irrigation drainage;
- f. Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with manufacturer's instructions;
- g. Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
- h. Routine external building wash down which does not use detergents;

i. Uncontaminated ground water or spring water;

j. Foundation or footing drains where flows are not contaminated with process materials such as solvents;

k. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

2. Except for flows from fire fighting activities, the Storm Water Pollution Prevention Plan must include:

a. Identification of each allowable nonstorm water source;

b. The location where it is likely to be discharged; and

c. Descriptions of appropriate BMPs for each source.

3. If mist blown from cooling towers is included as one of the allowable nonstorm water discharges, the facility must specifically evaluate the potential for the discharges to be contaminated by chemicals used in the cooling tower. The permittee must determine that the levels of such chemicals in the discharges will not cause or contribute to a violation of an applicable water quality standard after implementation of the BMPs selected to control such discharges.

F. Releases of hazardous substances or oil in excess of reportable quantities. The discharge of hazardous substances or oil in the storm water discharge(s) from this facility shall be prevented or minimized in accordance with the applicable storm water pollution prevention plan for the facility. This permit does not authorize the discharge of hazardous substances or oil resulting from an onsite spill. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110 (1998), 40 CFR Part 117 (1998) or 40 CFR Part 302 (1998) occurs during a 24-hour period, the permittee is required to notify the department in accordance with the requirements of Part III G as soon as he has knowledge of the discharge. Where a release enters a municipal separate storm sewer system (MS4), the permittee shall also notify the owner of the MS4. In addition, the storm water pollution prevention plan required by this permit must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate. This permit does not relieve the permittee of the reporting requirements of 40 CFR Part 110 (1998), 40 CFR Part 117 (1998) and 40 CFR Part 302 (1998) or § 62.1-44.34:19 of the Code of Virginia.

G. Storm water pollution prevention plans. A storm water pollution prevention plan is required to be developed for the facility. The plan shall be prepared in accordance with good engineering practices, and shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Permittees must implement the provisions of the storm water pollution prevention plan as a condition of this permit.

The storm water pollution prevention plan requirements of this permit may be fulfilled by incorporating by reference other plans or documents such as an erosion and sediment control plan, a spill prevention control and countermeasure (SPCC) plan developed for the facility under § 311 of the Clean Water Act or best management practices (BMP) programs otherwise required for the facility provided that the incorporated plan meets or exceeds the plan requirements of Part II G 4. If an erosion and sediment control plan is being incorporated by reference, it shall have been approved by the locality in which the activity is to occur or by another appropriate plan approving authority authorized under the Virginia Erosion and Sediment Control Regulation, 4 VAC 50-30. All plans incorporated by reference into the storm water pollution prevention plan become enforceable under this permit.

1. Deadlines for plan preparation and compliance.

a. For a storm water discharge associated with industrial activity that is existing on or before the effective date of this permit, the storm water pollution prevention plan shall be prepared and implemented as expeditiously as practicable, but not later than 270 days from the date of coverage under this permit. For a facility that was covered by the previous permit, a storm water pollution prevention plan was required to be developed and implemented for that facility. Within 120 days after the date of coverage under this permit, the existing storm water pollution

prevention plan shall be reviewed and modified, as appropriate, to conform to the requirements of this permit. The existing storm water pollution prevention plans shall continue to be implemented until a new plan, if required, is developed and implemented.

b. The plan for any facility where industrial activity commences after the effective date of this permit, and except as provided elsewhere in this permit, shall be prepared, implemented and provide for compliance with the terms of the plan and this permit on or before the date of submission of a registration statement to be covered under this permit.

c. In cases where construction is necessary to implement measures required by the plan, the plan shall contain a schedule that provides compliance with the plan as expeditiously as practicable, but no later than three years from the date of coverage under this permit. Where a construction compliance schedule is included in the plan, the schedule shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure.

2. Signature and plan review.

a. The plan shall be signed in accordance with Part III K, and be retained on-site at the facility covered by this permit in accordance with Part III B.

b. The permittee shall make the storm water pollution prevention plan, annual site compliance inspection report, or other information available to the department upon request.

c. The director, or his designee, may notify the permittee in writing at any time that the plan does not meet one or more of the minimum requirements of this part. Such notification shall identify those provisions of the permit which are not being met by the plan, and identify which provisions of the plan require modifications in order to meet the minimum requirements of this part. Within 60 days of such notification from the director, or as otherwise provided by the director, the permittee shall make the required changes to the plan and shall submit to the department a written certification that the requested changes have been made.

3. Keeping plans current. The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to surface waters of the state or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Part II G 4 b of this permit, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity.

4. Contents of plan. The plan shall include, at a minimum, the following items:

a. Pollution prevention team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water pollution prevention team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

b. Description of potential pollutant sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(1) Drainage. A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part II G 4 b (3) have occurred, and the locations of the following activities: fueling stations; vehicle and equipment maintenance and/or cleaning areas; loading/unloading areas; bag house or other dust control device, recycle/sedimentation pond, clarifier or other device used for the treatment of process wastewater, and the areas that drain to the treatment device, locations used for the storage or disposal of wastes; liquid storage tanks; processing areas; and storage areas. The map must indicate the outfall locations and the types of discharges contained in the drainage areas of the outfalls; and for

each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of the chemicals; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(2) Inventory of exposed materials. An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of three years prior to the date of coverage under this general permit and the present; method and location of on-site storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of three years prior to the date of coverage under this general permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(3) Spills and leaks. A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of three years prior to the date of coverage under this general permit. Such list shall be updated as appropriate during the term of the permit.

(4) Sampling data. A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(5) Risk identification and summary of potential pollutant sources. A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and on-site waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, etc.) of concern shall be identified.

c. Measures and controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(1) Good housekeeping. Good housekeeping requires the clean and orderly maintenance of areas that may contribute pollutants to storm waters discharges. Particular attention should be paid to areas where raw materials are stockpiled, material handling areas, storage areas, liquid storage tanks, and loading/unloading areas. The plan shall describe procedures performed to minimize the discharge of: spilled cement, aggregate (including sand and gravel), fly ash, settled dust, or other significant material in storm water from paved portions of the site that are exposed to storm water. Regular sweeping or other equivalent measures to minimize the presence of these materials shall be employed. The frequency of sweeping or equivalent measures shall be specified in the plan based upon a consideration of the amount of industrial activity occurring in the areas and the frequency of precipitation, but it shall be a minimum of once a week if cement, aggregate, kiln dust, fly ash or settled dust are being handled/processed. Where practicable, efforts must be made to prevent the exposure of fine granular solids (cement, fly ash, etc.) to storm water by storing these materials in enclosed silos/hoppers, buildings or under other covering.

(2) Preventive maintenance. A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and appropriate maintenance of such equipment and systems.

(3) Spill prevention and response procedures. Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

(4) Routine facility inspections. Facility personnel who are familiar with the industrial activity, the BMPs and the storm water pollution prevention plan shall be identified to inspect designated equipment and areas of the facility. Inspections shall be conducted while the facility is in operation and include, but are not limited to, the following areas exposed to storm water: material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, and truck wash down/equipment cleaning areas. The inspection frequency shall be specified in the plan based on a consideration of the level of industrial activity at the facility, but it shall be a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit. A set of tracking or followup procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained with the pollution prevention plan.

(5) Employee training. Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. A pollution prevention plan shall identify periodic dates for such training.

(6) Recordkeeping and internal reporting procedures. A description of incidents such as spills, or other discharges, along with other information describing the quality and quantity of storm water discharges shall be included in the plan. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(7) Sediment and erosion control. The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(8) Management of runoff. The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, wet detention/retention devices; or other equivalent measures.

d. Comprehensive site compliance evaluation. Qualified facility personnel who are familiar with the industrial activity, the BMPs and the storm water pollution prevention plan shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, in no case less than once a year. Such evaluations shall include the following:

(1) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(2) Based on the results of the evaluation, the description of potential pollutant sources identified in the plan in accordance with Part II G 4 b and pollution prevention measures and controls identified in the plan in accordance with Part II G 4 c shall be revised as appropriate within two weeks of such evaluation and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the evaluation.

(3) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with Part II G 4 d shall be made and retained as part of the storm water pollution prevention plan as required in Part III B. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part III K.

(4) Where compliance evaluation schedules overlap with inspections required under Part II G 4 c (4), the compliance evaluation may be conducted in place of one such inspection.

5. Special pollution prevention plan requirements:

a. Additional requirements for storm water discharges associated with industrial activity from facilities subject to § 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) reporting requirements. Potential pollutant sources for which the facility has reporting requirements under EPCRA 313 must be identified in the summary of potential pollutant sources as per Part II G 4 b.

b. Additional requirements for salt storage. Storage piles of salt used for deicing or other commercial or industrial purposes must be enclosed or covered to prevent exposure to precipitation (except for exposure resulting from adding or removing materials from the pile). Piles do not need to be enclosed or covered where storm water from the pile is not discharged to surface waters or the discharges from the piles are authorized under another permit.

Part III.

Conditions Applicable To All VPDES Permits.

A. Monitoring.

1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.

2. Monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency unless other procedures have been specified in this permit.

3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.

B. Records.

1. Records of monitoring information shall include:

- a. The date, exact place, and time of sampling or measurements;
- b. The individuals who performed the sampling or measurements;
- c. The dates and times analyses were performed;
- d. The individuals who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain (i) records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, (ii) copies of all reports required by this permit, and (iii) records of all data used to complete the registration statement for this permit for a period of at least three years from the date of the sample,

measurement, report or request for coverage. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the board.

C. Reporting monitoring results.

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to the department's regional office.
2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the department.
3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the department.
4. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to provide information. The permittee shall furnish to the department, within a reasonable time, any information which the board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the department upon request copies of records required to be kept by this permit.

E. Compliance schedule reports. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized discharges. Except in compliance with this permit, or another permit issued by the board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, for recreation, or for other uses.

G. Reports of unauthorized discharges. Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part III F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part III F, shall notify the department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of unusual or extraordinary discharges. If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the department within five days of discovery of the discharge in accordance with Part III I 2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

I. Reports of noncompliance. The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this subdivision:

- a. Any unanticipated bypass; and
- b. Any upset which causes a discharge to surface waters.

2. A written report shall be submitted within five days and shall contain:

- a. A description of the noncompliance and its cause;
- b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
- c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The board may waive the written report on a case-by-case basis for reports of noncompliance under Part III I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts III I 1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part III I 2.

NOTE: The immediate (within 24 hours) reports required in Parts III G, H and I may be made to the department's regional office by telephone or by fax. For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of planned changes.

1. The permittee shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

(1) After promulgation of standards of performance under § 306 of Clean Water Act which are applicable to such source; or

(2) After proposal of standards of performance in accordance with § 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with § 306 within 120 days of their proposal;

b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or

c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. The permittee shall give advance notice to the department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory requirements.

1. Registration statements. All registration statements shall be signed as follows:

a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation or (ii) the manager of one or more manufacturing, production, or operating facilities provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes (i) the chief executive officer of the agency or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports, etc. All reports required by permits, and other information requested by the board shall be signed by a person described in Part III K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part III K 1;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and

c. The written authorization is submitted to the department.

3. Changes to authorization. If an authorization under Part III K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part III K 2 shall be submitted to the department prior to or together with any reports, or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Parts III K 1 or 2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to comply. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water

Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under § 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under § 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the board. The board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a permit. This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State law. Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by § 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part III U), and "upset" (Part III V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and hazardous substance liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of solids or sludges. Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass.

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III U 2 and U 3.

2. Notice.

a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least 10 days before the date of the bypass.

b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part III I.

3. Prohibition of bypass.

a. Bypass is prohibited, and the board may take enforcement action against a permittee for bypass, unless:

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The permittee submitted notices as required under Part III U 2.

b. The board may approve an anticipated bypass, after considering its adverse effects, if the board determines that it will meet the three conditions listed above in Part III U 3 a.

V. Upset.

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part III V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.

2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An upset occurred and that the permittee can identify the causes of the upset;

b. The permitted facility was at the time being properly operated;

c. The permittee submitted notice of the upset as required in Part III I; and

d. The permittee complied with any remedial measures required under Part III S.

3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and entry. The permittee shall allow the director, or his designee, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit actions. Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permits.

1. Permits are not transferable to any person except after notice to the department. Except as provided in Part III Y 2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.

2. As an alternative to transfers under Part III Y 1, this permit may be automatically transferred to a new permittee if:

- a. The current permittee notifies the department at least 30 days in advance of the proposed transfer of the title to the facility or property;
- b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
- c. The board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part III Y 2 b.

Z. Severability. The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

9VAC25-193-80. (Repealed.)

ATTACHMENT B

Fact Sheet

FACT SHEET
MODIFICATION OF THE GENERAL VPDES PERMIT
FOR READY-MIXED CONCRETE PLANTS

The Virginia State Water Control Board has under consideration the modification of the general VPDES permit for point source discharges from the ready-mixed concrete industrial category to surface waters. This modification will add coverage for Standard Industrial Classification (SIC) Codes 3271 (Concrete Block and Brick) and 3272 (Concrete Products, Except Block and Brick) to the general permit VAG11, which became effective on October 1, 2003, and will expire on September 30, 2008. Facilities under SIC Codes 3271, 3272, and 3273 (Ready-Mixed Concrete) are collectively defined as "Concrete Products Facilities".

Permit Number: VAG11

Name of Permittee: Any owner of a concrete products facility in the Commonwealth of Virginia agreeing to be regulated under the terms of this general permit.

Facility Location: Commonwealth of Virginia

Receiving Stream: Surface waters within the boundaries of the Commonwealth of Virginia, except those specifically named in Board Regulations and Policies which prohibit such discharges. Discharge to surface waters may be through a municipal separate storm sewer system.

On the basis of preliminary review and application of lawful standards and regulations, the State Water Control Board proposes to modify the general permit subject to certain conditions and has prepared a draft permit modification. The Department of Environmental Quality has determined that this category of discharges is appropriately controlled under a general permit. The category of discharges to be included involves facilities with the same or similar types of operations and the facilities discharge the same or similar types of wastes. The draft of the general permit modification requires that all covered facilities meet standardized effluent limitations and monitoring requirements, and that all covered facilities develop a site-specific storm water pollution prevention plan.

Persons may comment in writing on the proposed general permit modification within 60 days from July 25, 2005. Comments should be addressed to the contact person listed below. Comments shall include the name, address, and telephone number of the writer, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered by the Board.

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting Valerie Rourke at:

Virginia Department of Environmental Quality
P.O. Box 10009
Richmond, Virginia 23240
TEL: (804) 698-4158
FAX: (804) 698-4116
E-mail: varourke@deq.virginia.gov

A public hearing will be held on this draft permit modification on August 30, 2005. Notice of the public hearing will be published in the newspaper and in the Virginia Register. Following the public comment period, the Board will make its determination regarding the proposed modification.

Proposed Modifications to the Ready-Mixed Concrete General Permit

This general permit currently covers point source discharges of process wastewaters and storm water runoff associated with the operation of ready-mixed concrete plants where the primary

industrial activity is classified as SIC Code 3273. The purpose of this modification is to add permit coverage for SIC Codes 3271 (Concrete Block and Brick) and 3272 (Concrete Products, Except Block and Brick) to the general permit. Facilities operating under SIC Codes 3271, 3272, and 3273 are collectively defined as "Concrete Products Facilities". This general permit does not exclude the coverage for a concrete products facility with a secondary industrial activity (i.e., other than SIC 3271, 3272 or 3273) co-located on site as long as the secondary activity does not generate any point source discharges. Coverage includes concrete products facilities, temporary ready-mixed plants erected on or near construction sites, vehicle/equipment maintenance activities at concrete products facilities, waste concrete reclamation, cement and aggregate unloading by rail and barge at concrete products facilities, and road salt storage.

Process Descriptions and Waste Characterizations

A. SIC 3271 - Concrete Block and Brick

Concrete block and brick are classified into the following products: structural block produced with lightweight aggregate such as cinder, expanded shale, pumice or other materials; structural block produced with heavyweight aggregate such as sand, gravel, crushed stone or other materials; decorative block - such as screen block, split block, slump block and shadowal block; and concrete brick.

The manufacturing process for concrete block and brick consists of mixing, forming, and curing. Typically, the aggregate, cement and water are weighed and mixed in batches of about four cubic yards in a rotary mixer. The concrete mix used for production of block and brick contains less water than ready-mixed concrete. The type of aggregate being used will determine if a lightweight or heavyweight product is produced. Color may be added to the mix to produce decorative block. The mixed concrete is fed into an automatic block molding machine, where the moist mix is rammed, pressed or vibrated into the desired shape. Following forming, the material is stacked onto iron framework cars and allowed to cure. To produce a structural high-strength block within a reasonable time period, the block must be cured under moist conditions. The three basic methods of curing are: (1) atmospheric; (2) low pressure steam; and (3) autoclave or high pressure steam.

Atmospheric curing produces a lower strength block than the other two methods of curing. Atmospheric curing uses ambient heat and humidity, and heat of hydration to cure the block, and also includes curing within enclosures at ambient conditions. Curing usually takes place for about four hours. There are no additional wastewaters produced from this curing process.

In the low pressure steam method, the loaded curing cars are placed into a chamber or kiln where low pressure steam less than 150 psi is injected from perforated pipes for approximately 8-10 hours, depending on mix conditions, user specifications, and ambient temperature. Waste water from this curing method consists primarily of steam condensate, which contains some suspended solids, dissolved solids, COD, oil and grease and a high pH. The low pressure steam is generated by a boiler which requires periodic blowdown.

The autoclave or high pressure steam curing method produces a higher strength block with less shrinkage in less time than the low pressure steam curing method. For this method the curing cars are loaded in a large horizontal, cylindrically shaped autoclave where high pressure steam (greater than 150 psi) is injected or convected. After a curing cycle of about 8 hours the steam is released to the atmosphere and the blocks are removed and stored. An alternative method of steam production uses a hot oil convection method, where water is placed in a trough within the autoclave and hot oil heats the water into steam. Following curing, the autoclave is allowed to cool and a portion of the steam condenses back into the trough. Periodically the trough water is discharged because the alkalinity, due to the pickup of calcium oxide, makes the water corrosive to the steel racks of the curing cars. Wastewater discharges from the autoclave

curing process can include boiler blowdown, autoclave blowdown condensate, and autoclave purge. Pollutants include suspended solids, COD, oil and grease, and high pH, resulting from autoclave blowdown condensate and in the convection process, autoclave purge.

The primary source of wastewater from concrete block and brick facilities is equipment wash-off, including: delivery trucks, conveyor belts, transport buckets, central mixers and forms. Generally only suspended solids are a problem in this wastewater and can be handled with simple settling. Other potential sources of wastewater include: accidental spill wash-down, storm water runoff, and noncontact cooling of bearings and compressors. Spill wash-down and storm water runoff can be handled with other wash-waters. The noncontact cooling water (and other clean wastewater) can be used for mixing water makeup, aggregate moisture control, and yard dust control.

B. SIC 3272 - Concrete Products, Except Block and Brick

Concrete Products, Except Block and Brick include concrete pipe, precast concrete products, and prestressed concrete products.

Concrete Pipe. Concrete pipe products include: culvert pipe (reinforced and non-reinforced), storm sewer pipe (reinforced and non-reinforced), sanitary sewer pipe (reinforced and non-reinforced), pressure pipe (reinforced, prestressed, pretensioned and other pressure pipe), irrigation pipe and drain (tile), and other concrete pipe (e.g., manholes and conduits).

Concrete pipe is generally produced by three methods: (1) the vertical packerhead (tamping) method; (2) the vertical cast method; and (3) the spin casting production method. The vertical packerhead method uses a machine called a packerhead to compact and vibrate a moist concrete mix into a steel form. The method is used to produce pipe up to five feet in diameter. The vertical cast method is used to produce reinforced pipe. Due to labor cost and time, this method is generally limited to production of reinforced pipe over five feet in diameter. A wet concrete mix from a central mixer is transported by buckets and poured into a vertical steel form containing a reinforcing cage. The steel forms are stripped from the pipe after the concrete sets. The spin casting production method is used to produce reinforced pipe up to four feet in diameter. The form containing a reinforcing cage is placed horizontally and rotated at a high rate, while concrete is added by a reciprocating nozzle. The spinning action densifies the concrete on the inside of the form and dewateres it. The inner surface of the pipe is finished by a mechanical roller. Reinforced concrete pressure pipe, produced by spin casting, uses a hydraulically tested sheet steel cylinder form that remains as part of the finished pipe.

All concrete pipe is cured at ambient conditions or spray cured, until it reaches a certain green strength, at which time it is cured by low pressure steam either in a kiln or in a chamber constructed around the pipe. For pipe produced by the packerhead method, the forms are usually removed before steam curing, while for the vertical cast and spin casting methods the forms usually remain on the pipe during curing. In all cases except reinforced concrete pressure pipe, a form release oil is used. In the production of reinforced concrete pressure pipe additional processes include: hydraulic testing of the cylinder, wrapping the cured pipe with high strength steel wire, and coating the steel wire wrap with concrete grout. There is no waste water from atmospheric curing. Waste water from steam curing and spray curing contains suspended solids, oil and grease and has a high pH.

Precast Concrete Products. Precast concrete products include: roof and floor units (slabs and tile; joints and beams); architectural wall panels; pilings, posts and poles; cast stone (products for architectural purposes); prefabricated building systems; other precast construction prod.; burial vaults and boxes; silo staves; septic tanks; dry-mixed concrete materials (e.g., Sakrete); other precast (e.g., laundry tubs).

Simple precast concrete products are produced by pouring the concrete from a mixer into steel forms, and allowing the product to cure, either at ambient conditions, with low pressure steam, or with a water spray. Curing takes place in two steps, first with the form on then off. The second curing step usually takes place at ambient conditions. Reinforced concrete products contain steel structural members to provide increased strength.

Precast architectural wall panels are generally finished to produce a decorative surface of exposed aggregate. For the most common production method, a retarder is spread in the form bottom, reinforcing steel is placed in the form, and the concrete mix is cast. When the concrete has set and the form is removed, the surface is washed with a weak acid solution, sandblasted, or washed with high pressure water to clean away the unset surface cement and expose the coarse aggregate. The panel is then cured completely in a storage yard.

Prestressed Concrete Products. Prestressed concrete products are chiefly used as structural and architectural components and include: single tees, double tees, and channels; piling, bearing piles, and sheet piles; bridge beams; solid and hollow cored slabs and panels; other prestressed products (e.g., arches); joist, girders, and beams (other than bridge beams).

Prestressed concrete products are produced in similar fashion as precast reinforced concrete products with the substitution of steel cables under tension instead of steel rods for reinforcement. Prestressed concrete products may be either pretensioned or post-tensioned.

The wastewater discharge from Concrete Products, Except Block and Brick facilities includes transport bucket and central mixer washout, form wash-off, condensate from steam curing, spray curing wastewater, surface finishing water, spin cast wash-water, pre-wetting of imbedded pressure pipe, storm water, boiler blowdown, noncontact cooling water from bearings and compressors, and miscellaneous equipment wash-off. Pollutants in the wastewater discharge includes suspended solids, oil and grease, high pH, and COD.

Effluent Limitations and Monitoring Requirements

The sources of wastewater and the pollutants of concern for Concrete Block and Brick facilities and Concrete Products, Except Block and Brick facilities are, for all intents and purposes, identical to the wastewater sources and pollutants of concern for ready-mixed concrete plants (details regarding the sources of wastewater and the pollutants of concern for ready-mixed concrete plants are contained in the Fact Sheet for the existing Ready-Mixed Concrete General Permit that was reissued in 2003). As such, no additional or amended effluent limitations or monitoring requirements are proposed for this modification.

Proposed Special Conditions and Their Basis

The following special conditions are proposed to be amended for this modification:

4. Restrictions of washing activities.

Modified the first part of the requirement to list all the washdown and washout restrictions that EPA listed for concrete products facilities in Sector E of their NPDES Storm Water Multi-Sector General Permit that was reissued on October 30, 2000. The list in the existing permit only covered ready-mixed concrete plants.

6. Prohibition of sewage discharge.

Added the word "domestic" before "sewage discharges" to clarify that domestic sewage discharges are not permitted under this general permit.

Requirements for Storm Water Management

The sector-specific storm water management requirements for Sector E (Glass, Clay, Cement, Concrete, and Gypsum Products Facilities) that were developed by EPA for their NPDES Storm Water Multi-Sector General Permit that was reissued on October 30, 2000, were incorporated into the existing Ready-Mixed Concrete General Permit during the 2003 reissuance. Therefore, no additional requirements are proposed for this modification.

General Permit Coverage

This general permit became effective on October 1, 2003, and will expire on September 30, 2008. The permit modification will become effective February 8, 2006. Every authorization under this general permit will expire at the same time and all authorizations will be renewed on the same date, provided a complete registration statement has been filed prior to the general permit's expiration date.

All persons desiring to be covered by this general permit must register with the Department by filing a registration statement and applicable fees. The registration statement shall be submitted and a notification of coverage issued prior to any discharges or other activities for which this permit is required.

Concrete products facilities that have not already received coverage under the Ready-Mixed General Permit, and that are discharging process wastewater and/or storm water associated with industrial activity to surface waters on the effective date of this general permit modification, and which have not been issued an individual VPDES permit, are required to submit the registration statement. Existing operations with individual VPDES permits that wish to seek coverage under the proposed general permit modification would have to file a registration statement at least 180 days prior to the expiration date of the individual VPDES permit. For all new concrete products facilities that will have discharges of process wastewater or storm water associated with industrial activity and that will begin activities after the effective date of this permit, the registration statement shall be filed at least 30 days prior to the commencement of operation of the concrete products facilities.

This general permit does not cover activities or discharges covered by an individual VPDES permit until the individual permit has expired or has been revoked. Any person conducting an activity covered by an individual permit, which could be covered by this general permit, may request that the individual permit be revoked and register for coverage under this general permit. Antibacksliding will be considered prior to granting the coverage under this general permit. Any owner or operator not wishing to be covered or limited by this general permit may make application for an individual VPDES permit, in accordance with VPDES procedures, stating the reasons supporting the request. This general permit will not apply to any new or increased discharge that will result in significant effects to the receiving waters. The determination is made in accordance with the State Water Control Board's Antidegradation Policy contained in the Virginia Water Quality Standards, 9 VAC 25-260-30.

All facilities that the Department believes are eligible for coverage under this general permit will be authorized to discharge under the terms and conditions of the permit after a complete registration statement is submitted, the applicable permit fee is paid, and the Department sends a copy of the general permit to the applicant. If this general permit is inappropriate, the applicant will be so notified and the requirement that an individual permit or alternate general permit is needed will remain in effect.

ATTACHMENT C

Modified Registration Statement and Instructions

REGISTRATION STATEMENT FOR THE GENERAL VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM (VPDES) PERMIT FOR CONCRETE PRODUCTS FACILITIES

1. APPLICANT INFORMATION

- A. Name of Facility: _____
- B. Facility Owner: _____
- C. Owner's Mailing Address
- a. Street or P.O. Box _____
- b. City or Town _____ c. State _____ d. Zip Code _____
- e. Phone Number _____
- D. Facility Location: _____
(Street Number, Route Number, or Other Identifier)
- E. Is the operator of the facility also the owner? Yes _____ No _____ If "No", complete F & G.
- F. Name of Operator: _____
- G. Operator's Mailing Address
- a. Street or P.O. Box _____
- b. City or Town _____ c. State _____ d. Zip Code _____
- e. Phone Number _____

2. FACILITY INFORMATION

- A. Primary Standard Industrial Classification (SIC) Code: _____
Secondary SIC Codes: _____
- B. Nature of business: (provide a brief description) _____

- C. Is this a proposed or existing facility? _____
Does this facility currently have a VPDES permit? Yes _____ No _____
If yes, give permit number. _____
Does this facility currently have a VPA permit? Yes _____ No _____
If yes, give permit number. _____
- D. Describe any type of wastewater treatment or reuse/recycle system(s); identify any system(s) which operate only in a "no discharge" mode: _____

If settling basins are used for treatment and control of process wastewater and commingled storm water, indicate the date of construction _____
Are these basins lined with concrete or any other impermeable materials? Yes _____ No _____
- E. Are there vehicle/equipment maintenance activities on site? Yes _____ No _____
If yes, is there any process wastewater generated from these activities? Yes _____ No _____

F. Will this facility discharge non-contact cooling water from a geothermal unit or other system?

Yes ____ No ____ If "Yes", describe the source of non-contact cooling water _____

G. Are any chemical additives used in the geothermal or other system which discharges non-contact cooling water? Yes ____ No ____ If "Yes", complete a, b, c and d.

a. List the chemical additive to be employed and its purpose; _____

b. Give the proposed schedule and quantity of chemical usage, and the estimated concentration in the discharge; _____

c. Describe any wastewater treatment or retention (if any) to be provided during the use of the additives; _____

and

d. Attach a Material Safety Data Sheet (MSDS) and available aquatic toxicity information for each additive proposed for use.

H. Describe any measures employed to reclaim, reuse or dispose of the waste concrete materials.

3. FACILITY DRAWING

Attach a schematic drawing showing the source(s) of water used on the property, the industrial operations contributing to or using water, and the conceptual design of the methods of treatment and disposal of wastewater and solids.

4. MAP

Attach a topographic map extending to at least one mile beyond property boundary. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge points, and the locations of any wells, springs, and other surface water bodies.

5. DISCHARGE INFORMATION

A. List all discharge outfalls by a number that is the same as on the map required in Question 4. Identify the processes which discharge through each outfall. Estimate the flow in gallons per day (gpd). Give the name of the waterbody receiving the discharge.

Outfall No.	Operation	Daily Flow (gpd) Maximum/Average	Receiving Stream
-------------	-----------	-------------------------------------	------------------

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

B. Identify the duration and frequency of the discharge for each separate discharge point:

Outfall No.	Hours/Day	Days/Week
-------------	-----------	-----------

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

6. STORM WATER POLLUTION PREVENTION PLAN

If your facility is a proposed one, as identified under Item 2.C, and includes storm water outfall(s), as identified under Item 5.A above, has a Storm Water Pollution Prevention Plan been prepared? Yes _____ No _____

7. CERTIFICATION

"I hereby grant to duly authorized agents of the Department of Environmental Quality, upon presentation of credentials, permission to enter the property where the treatment works is located for the purpose of determining compliance with or the suitability of coverage under the General Permit. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

Signature: _____ Date: _____

Name of person signing above: _____
(printed or typed)

Title: _____

REQUIRED ATTACHMENTS:

1. MSDS and available aquatic toxicity information for Chemical Additives (if applicable)
2. Facility Drawing
3. Topographic Map

For Department use only:

Accepted/Not Accepted by: _____ Date: _____

Basin _____ Stream Class _____ Section _____

Special Standards _____

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INSTRUCTION FOR COMPLETING THE REGISTRATION STATEMENT FOR THE GENERAL VPDES PERMIT FOR CONCRETE PRODUCTS FACILITIES (VAG11)

WHO MUST FILE THE REGISTRATION STATEMENT

This registration statement must be completed and submitted by any concrete products facilities requesting coverage under the above general permit for process wastewater discharges and/or regulated storm water discharges.

WHERE TO FILE THE REGISTRATION STATEMENT

The completed registration statement with original signature, a copy of the fee form, and a copy of your check for the appropriate fee should be sent to the Department of Environmental Quality Regional Office for your area. The original fee form and the original check should be sent to Receipts Control at the DEQ's Richmond Office. The address to send the fee form and the check is provided in the Fee Form Instructions. The Regional Office for your area depends on the county in which the discharge is located. Regional office addresses can be obtained from our website at www.deq.virginia.gov, or by calling the DEQ at (804) 698-4000.

COMPLETENESS

Complete all items except where indicated, or enter NA for "not applicable" in order for your registration statement to be accepted. If you need more space than the form allows, write on and attach extra sheets of paper.

DEFINITIONS

SIC Code mean the "Standard Industrial Classification" code listed in the Federal Office of Management and Budget (OMB) SIC Manual, 1987. SIC codes are used as identifiers of industries with certain characteristics. The SIC code for Concrete Block and Brick Facilities is 3271, the SIC Code for Concrete Products Facilities, Except Block and Brick is 3272, the SIC Code for Ready-Mixed Concrete Plants is 3273.

Storm water, for the purposes of this form, means storm water runoff that is regulated by the EPA and State storm water regulations. It refers to the runoff during storms that may come into contact with raw materials, products or waste materials from concrete products facilities.

Process wastewater is water that was used in the processing of concrete products, such as truck washout, truck wash-off, central mixer washout, washing of transport buckets, forms or other equipment, and non-contact cooling water from geothermal systems or other such systems. Domestic sewage discharges are not covered by this general permit.

LINE BY LINE INSTRUCTIONS

Item 1. APPLICANT INFORMATION

- Item A: Provide the name of the concrete products facility here.
- Item B: Provide the name of the person or corporation that owns the business. This does not have to be the owner of the building (e.g., if it is leased) but should be who is responsible for the business and wants coverage under the general permit.
- Item C: Provide the mailing address and phone number of the above person.
- Item D: Indicate here the physical location of the facility if it can't be located from the mailing address.
- Item E: If someone other than the owner listed in item B runs the plant and is the person with whom business will be conducted, check **No**. Otherwise check **Yes**.
- Item F: If **No** was checked above, indicate the name of the person other than the owner who operates the facility.
- Item G: Provide the address and phone number of the person other than the owner here.

Item 2. FACILITY INFORMATION

- Item A: Provide the facility's primary and secondary SIC Codes. This general permit will cover a facility or portions of a facility where the primary purpose is classified as SIC Code 3271, 3272 or 3273. This general permit does not exclude coverage for a concrete products facility with a secondary industrial activity co-located on site as long as the secondary activity does not generate any point source discharge.
- Item B: Provide a brief description of the process activities. If the facility is a ready-mixed concrete plant, indicate if the plant is permanent or portable.
- Item C: Provide permit number for any valid VPDES permit or VPA permit/No Discharge Certificate held by the facility.
- Item D: Describe the type(s) of wastewater treatment employed, including reuse/recycle system(s). Identify any system(s) which operates only in a "no discharge" mode. Also identify the date of construction and liner installation of the settling basins. All settling basins that were constructed on or after February 2, 1998 are

required to be lined with concrete or any other impermeable materials prior to commencing operation. DEQ requires that liners have a maximum coefficient of permeability of 1×10^{-6} cm/sec. It is recommended that soil used as liners be capable of achieving a maximum coefficient of permeability of 1×10^{-7} cm/sec or less. Total soil liner thickness should be one foot after compaction of two separate lifts of equal thickness. Synthetic liners are not recommended due to their tendency of puncture. If concrete is used, a minimum thickness of one foot reinforced concrete is recommended.

- Item E: Identify if there are any vehicle/equipment maintenance activities on site. Also indicate if there are any process wastewaters produced as a result of these activities.
- Item F: Indicate if the facility discharges any cooling water from a geothermal unit or other system. Also describe the source of the cooling water if applicable.
- Item G: The use of any chemical additives, except chlorine, without prior approval is prohibited under this general permit. You should list all chemicals currently used or anticipated to use within the life of the permit term on the registration statement. Prior approval shall be obtained from the DEQ before any changes are made to the chemical usage in the geothermal or other system. The MSDS and available aquatic toxicity information for each additive used may be obtained from the manufacturer of the chemical additives.
- Item H: Describe measures used by the facility to reclaim, reuse or dispose of the waste concrete materials. The general permit restricts waste concrete reclamation to a designated area and prohibits any untreated discharge from this area to surface water.

Item 3: FACILITY DRAWING

A schematic drawing should show the source(s) of water used for production, the industrial operations contributing to or using water, and the conceptual design of the methods of treatment and disposal of wastewater and solid materials (such as solids from the settling basins and waste concrete materials). If a liner is installed in the settling basin(s), the drawing should reflect its specifications.

Item 4: MAP

Attach a topographic map extending to at least one mile beyond property boundary. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge points, and the locations of any wells, springs, and other surface water bodies.

Item 5: DISCHARGE INFORMATION

List all discharge outfalls by a number, such as 001, 002, etc. Discharge to the receiving stream may be through a municipal separate storm sewer system. In such cases, identify the receiving stream with a footnote recognizing the owner of the municipal separate storm sewer system which the outfall discharges through.

Item 6: STORM WATER POLLUTION PREVENTION PLAN

For proposed facilities including storm water outfall(s), a Storm Water Pollution Prevention Plan shall be prepared and implemented on or before the date of submission of the registration statement.

Item 7: CERTIFICATION

All registration statement shall be signed as follows:

1. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
2. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
3. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

ATTACHMENT D

DEQ FAQ (Frequently Asked Questions) Sheet



AMENDMENTS TO THE GENERAL VPDES PERMIT REGULATION FOR READY-MIXED CONCRETE PLANTS: HOW THIS WILL AFFECT YOU

In May of 2005, the Department of Environmental Quality (DEQ) proposed amendments to 9 VAC 25-193 – General Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulation for Ready-Mixed Concrete Plants. The most significant of the amendments included the following:

1. Added permit coverage for the discharges of process wastewater and/or storm water from concrete block and brick facilities (SIC Code 3271) and concrete products facilities, except block and brick (SIC Code 3272), in addition to coverage already provided for ready-mixed concrete facilities (SIC Code 3273). *This change will allow facilities in SIC Codes 3271 and 3272 that are already regulated under the VPDES Permit Program for their process wastewater discharges and/or their storm water discharges the option of obtaining general permit coverage under this permit. It will also allow new facilities and facilities that require VPDES permit coverage in the future the same option;*
2. Changed the name of the regulation to “General Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulation for Concrete Products Facilities”. *This change reflects that all concrete products facilities are now eligible for coverage under this general permit; and*
3. Changed the permit special condition no. 4 as follows:

~~“There shall be no product mixing unit washout or truck washing activities conducted outside of the~~ All washdown and washout of trucks, mixers, transport buckets, forms or other equipment shall be conducted within designated washdown and washout areas. All washout/washdown water shall be collected for recycle or treated prior to discharge.” *This change was made for consistency with EPA's "concrete products facilities" requirement in their Industrial Storm Water General Permit.*

During the 60-day public comment period for the proposed regulation amendments, the DEQ received several comments and questions. In response, DEQ felt it would be helpful to provide a list of frequently asked questions with answers for the purpose of better informing the public about the affect these changes to the regulation will have on producers of ready-mixed concrete, concrete block and brick, and concrete products, except block and brick in Virginia.

Hereafter, the General Virginia Pollutant Discharge Elimination System (VPDES) Regulation for Ready-Mixed Concrete Plants will be referred to as the **Concrete Products Facilities General Permit**.



Q: Why does DEQ want to include SIC Codes 3271 (concrete block and brick) and 3272 (concrete products, except block and brick) for coverage under the Concrete Products Facilities General Permit?

A: DEQ has included SIC Codes 3271 and 3272 for coverage under the Concrete Products Facilities General Permit to allow these industries the option to cover their process wastewater, storm water or both under one general permit, thereby saving time, money and confusion for the applicant. Previously, facilities under SIC Codes 3271 and 3272 could only cover their process wastewater discharges under an individual VPDES permit, which was much more expensive (compare \$3,300 to \$10,200 for an individual permit application, to \$600 for general permit coverage).

Q: Who must apply for the Concrete Products Facilities General Permit once it becomes effective?

A: Existing ready-mixed concrete facilities (SIC Code 3273) that already have the Concrete Products Facilities General Permit do not have to do anything until the permit expires on September 30, 2008, at which time they will need to reapply for permit coverage. New ready-mixed concrete facilities that will have process wastewater and/or storm water discharges must apply for permit coverage prior to beginning operations.

Existing facilities that produce concrete block and brick (SIC Code 3271) and concrete products, except block and brick (SIC Code 3272) that are presently covered for their process wastewater discharges under an individual industrial VPDES permit do not have to do anything at this time. If a facility wishes to switch their coverage to this amended general permit, they should contact the DEQ Regional Office that serves the area where the facility is located to verify eligibility.

Existing facilities that produce concrete block and brick (SIC Code 3271) and concrete products, except block and brick (SIC Code 3272) that are presently covered for their storm water discharges under the General VPDES Permit for Discharges of Storm Water Associated with Industrial Activity (VAR5) do not have to do anything at this time. However, when that permit is reissued on July 1, 2009, coverage for facilities in SIC Codes 3271 and 3272 will be eliminated. At that time, facilities will be required to switch their coverage over to this amended general permit.

New facilities that produce concrete block and brick (SIC Code 3271) and concrete products, except block and brick (SIC Code 3272) need not apply for this amended permit unless they have a process wastewater discharge to surface waters. While the raw production materials used by industries under SIC Codes 3271, 3272 and 3273 are very similar, it is recognized that the production processes among these industries are different and can generate varying quantities of production wastewater. Production of concrete block and brick and concrete products other than block and brick, typically generate far less process wastewater than production of ready-mix concrete. Consequently, facilities that produce concrete block and brick and concrete products other than block and brick, seldom have a process wastewater discharge that would require this permit. However, there are some facilities in Virginia, primarily manufacturers of concrete products other



than block and brick, that do have a process wastewater discharge, and will be required to obtain coverage under this general permit, or an individual industrial VPDES permit.

Q: Are there any advantages to obtaining the Concrete Products Facilities General Permit if you already have an individual VPDES Permit for your process wastewater discharge?

A: Because process wastewater discharges from facilities under SIC Codes 3271 (concrete block and brick) and 3272 (concrete products, except block and brick) were not previously eligible for the Concrete Products Facilities General Permit, these facilities were required to obtain individual VPDES permits. The principle disadvantage of an individual VPDES permit compared to a general VPDES permit, such as the Concrete Products Facilities General Permit, is cost. The application fee for an individual industrial VPDES permit varies from \$3,300 to \$10,200, while the application fee for the Concrete Products Facilities General Permit is only \$600. An individual industrial VPDES permit will also contain conditions specific to the facility for which the permit is issued. In contrast, a general VPDES permit will contain generic conditions applicable to many facilities that produce wastewater of similar character, requiring similar treatment and discharge limits.

Q: If I have an individual industrial VPDES permit but become eligible for the Concrete Products Facilities General Permit, do I need to apply immediately for the Concrete Products Facilities General Permit? Can I get a refund in the difference of cost between the individual VPDES permit and the Concrete Products Facilities General Permit?

A: If you have an individual VPDES permit but become eligible for the Concrete Products Facilities General Permit, you do not need to apply immediately for the general permit. You may allow your individual VPDES permit to expire and apply for the general permit 180 days prior to expiration of the individual permit or have the individual permit voluntarily terminated and the general permit issued in its place. Because there is no refund for the difference of the application fee between the individual and general VPDES permits when the individual VPDES permit is terminated, most permittees choose to allow the individual permit to expire and then replace it with the general VPDES permit. Note that individual permit coverage should be converted to general permit coverage prior to April 1st of the billing year to avoid having to pay the DEQ Annual Maintenance Fee for that billing year.

Q: I already have a General VPDES Permit for Discharges of Storm Water Associated with Industrial Activity. Is the Concrete Products Facilities General Permit the same permit or a different permit?

A: The General VPDES Permit for Discharges of Storm Water Associated with Industrial Activity, hereafter referred to as the Industrial Storm Water General Permit, is not the same as the Concrete Products Facilities General Permit. The Industrial Storm Water General Permit regulates only storm water discharges, while the Concrete Products Facilities General Permit can regulate both a storm water discharge and a process wastewater discharge.



Q: If the Industrial Storm Water General Permit and the Concrete Products Facilities General permit are two different permits, do I need to have both?

A: Because the Concrete Products Facilities General Permit can regulate storm water and process wastewater discharges, facilities under SIC Codes 3271, 3272 and 3273 with both a process wastewater and storm water discharge can apply for only the Concrete Products Facilities General Permit. Facilities under SIC Codes 3271 (concrete block and brick) and 3272 (concrete products, except block and brick) with only a storm water discharge, are currently regulated under an Industrial Storm Water General Permit and will not need to apply for a Concrete Products Facilities General Permit until 30 days prior to expiration of the Industrial Storm Water General Permit on July 1, 2009. At that time, storm water discharges for facilities under SIC Codes 3271 and 3272 will no longer be regulated by the Industrial Storm Water General Permit and will be required to apply for the Concrete Products Facilities General Permit.

Q: Are there any difference between the Concrete Products Facilities General Permit and the Industrial Storm Water General Permit and if so, what are they?

A: There are some differences between the Concrete Products General Permit and the Industrial Storm Water General Permit as follows:

1. The Concrete Products General Permit requires the facilities to sample their storm water for TPH (total petroleum hydrocarbons); the Industrial Storm Water General Permit does not require this parameter. The rest of the storm water sampling parameters (TSS, pH, and Total Recoverable Iron) are the same for both permits, and the sampling frequency (once/year) is the same.
2. The Industrial Storm Water General Permit allows facilities to ask DEQ for a waiver from the storm water sampling requirements for the rest of the permit term (which could be up to three years) if their storm water sampling results for two consecutive sampling years show that the sampled parameters are below the permit "benchmark" monitoring values. The Concrete Products General Permit does not have this sampling waiver provision.

Aside from these differences, the storm water permit requirements are the same for both permits.

Q: If process wastewater, storm water or both are discharged from my facility directly or indirectly to a sanitary sewer system, what permit do I need?

A: If process wastewater, storm water or both from your facility are discharged directly or indirectly to a sanitary sewer system, you do not need either the Concrete Products Facilities General Permit or the Industrial Storm Water General Permit. If, however, you are notified to cease your discharge to the sanitary sewer system by the owner or operator of that system, you may be required to apply for one of these two permits. In this situation, you are advised to contact the nearest DEQ Regional Office to give you an on-site determination.



Q: Why didn't owners or operators of facilities under SIC Codes 3271 (concrete block and brick) and 3272 (concrete products, except block and brick) located in Virginia, receive the public notice for proposed amendments to the Concrete Products Facilities General Permit?

A: When a general permit of the DEQ is being amended for reauthorization or modification, the notice of the amendment is published in a local Richmond newspaper and the Virginia Register. Additionally, it is the policy of this agency, although not required by regulation or statute, to notify facilities that already hold a general permit of an amendment to reauthorize the permit. Current permit holders of the Concrete Products Facilities General Permit were notified of the pending amendments to this general permit by copy of the public notice mailed in late July and early August 2005.

Proposed amendments to the Concrete Products Facilities General Permit will not cause facilities under SIC Codes 3271 (concrete block and brick) and 3272 (concrete products, except block and brick) to apply for this permit unless they do so voluntarily. Such might be the case for a small number of facilities (≤ 12) that want to switch from an individual industrial VPDES permit to the Concrete Products Facilities General Permit for discharge of their process wastewater.

It should be noted that future amendments to the Industrial Storm Water General Permit anticipated with the reissuance of this permit on July 1, 2009, will eliminate coverage for storm water discharges from facilities under SIC Codes 3271 and 3272. Prior to this date, affected facilities will receive public notice and will be advised to obtain either an individual industrial VPDES permit or the Concrete Products Facilities General Permit for their storm water discharge.

Q: Who can I contact if I have general questions about the Concrete Products Facilities General Permit or the Industrial Storm Water General Permit?

A: For general information about the **Concrete Products Facilities General Permit**, please contact Valerie Rourke: Telephone (804) 698-4158; e-mail varourke@deq.virginia.gov; mailing address – Department of Environmental Quality, 629 East Main Street, P.O. Box 10009, Richmond, Virginia, 23240.

For general questions and information about the **Industrial Storm Water General Permit**, please contact Burt Tuxford: Telephone (804) 698-4086; e-mail brtuxford@deq.virginia.gov; mailing address – Department of Environmental Quality, 629 East Main Street, P.O. Box 10009, Richmond, Virginia, 23240.

Information regarding these general permit regulations is also available on the DEQ website at <http://www.deq.virginia.gov/>.

ATTACHMENT E

Modified General VPDES Permit

General Permit No: VAG11
Effective Date: October 1, 2003
Expiration Date: September 30, 2008
Modification Date: February 8, 2006

GENERAL PERMIT FOR CONCRETE PRODUCTS FACILITIES
AUTHORIZATION TO DISCHARGE UNDER THE
VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM
AND
THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act, as amended, and pursuant to the State Water Control Law and regulations adopted pursuant thereto, owners of concrete products facilities are authorized to discharge to surface waters within the boundaries of the Commonwealth of Virginia, except those specifically named in board regulations or policies which prohibit such discharges.

The authorized discharge shall be in accordance with this cover page, Part I—Effluent Limitations, Monitoring Requirements, and Special Conditions, Part II—Storm Water Management, and Part III—Conditions Applicable to All VPDES Permits, as set forth herein.

Part I. Effluent Limitations and Monitoring Requirements.

A. Effluent limitations and monitoring requirements.

1. Process wastewater.

During the period beginning on the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge process wastewater which may contain input from vehicle/equipment maintenance activities, and may be commingled with noncontact cooling water or storm water associated with industrial activity. Samples taken in compliance with the monitoring requirements specified below shall be taken at outfall(s).

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	
	Average	Maximum	Minimum	Frequency	Sample Type
Flow (MGD)	NL	NL	NA	⁽⁶⁾	Estimate
Total Suspended Solids (mg/l)	30	60	NA	⁽⁶⁾	Grab
pH (standard units)	NA	9.0 ⁽¹⁾	6.0 ⁽¹⁾	⁽⁶⁾	Grab
Total Petroleum Hydrocarbons ⁽²⁾ (mg/l)	NA	15	NA	1/3 Months	Grab
Total Residual Chlorine ⁽³⁾ (mg/l)	0.016	0.016	NA	⁽⁶⁾	Grab
Ammonia-N ⁽³⁾ (mg/l)	NA	NL	NA	⁽⁶⁾	Grab
Temperature ⁽⁴⁾ (°C)	NA	⁽⁵⁾	NA	⁽⁶⁾	Immersion Stabilization

NL = No limitation, monitoring required

NA = Not applicable

⁽¹⁾ Where the Water Quality Standards (9 VAC 25-260) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.

⁽²⁾ Total Petroleum Hydrocarbons limitation and monitoring are only required where a discharge contains process wastewater generated from the vehicle/equipment maintenance activities. Total Petroleum Hydrocarbons shall be analyzed using the Wisconsin Department of Natural Resources Modified Diesel Range Organics Method as specified in Wisconsin publication SW-141 (1995), or by EPA SW-846 Method 8015B (1996) for diesel range organics, or by EPA SW-846 Method 8270C (1996). If Method 8270C is used, the lab must report the combination of diesel range organics and polynuclear aromatic hydrocarbons.

⁽³⁾ Chlorine limitation and monitoring are only required where the discharge contains cooling water that is chlorinated. Ammonia monitoring is only required where the discharge contains cooling water that is disinfected using chloramines.

⁽⁴⁾ Temperature limitation and monitoring are only required where a discharge contains cooling water.

⁽⁵⁾ The effluent temperature shall not exceed a maximum 32°C for discharges to nontidal coastal and piedmont waters, 31°C for mountain and upper piedmont waters, 21°C for put and take trout waters, or 20°C for natural trout waters. No maximum temperature limit applies to discharges to estuarine waters.

For estuarine waters, nontidal coastal and piedmont waters, mountain and upper piedmont waters, and put and take trout waters, the effluent shall not cause an increase in temperature of the receiving stream of more than 3°C above the natural water temperature. For natural trout waters, the temperature of the effluent shall not cause an increase of 1°C above natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2°C per hour, except in the case of natural trout waters where the hourly temperature change shall not exceed 0.5°C.

Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point-source discharge.

⁽⁶⁾ For a facility that was covered by the previous general permit, and reduced monitoring was granted and compliance demonstrated, monitoring frequency shall be 1/quarter. In all other cases, monitoring frequency shall be 1/month in the first year of permit coverage. If the first year results demonstrate full compliance with the effluent limitations and the permittee receives authorization from the DEQ regional office, monitoring frequency shall be reduced to 1/quarter. Should the permittee be issued a warning letter related to violation of effluent limitations, a notice of violation, or be the subject of an active enforcement action, monitoring frequency shall revert to 1/month, upon issuance of the letter or notice or initiation of the enforcement action and remain in effect until the permit's expiration date. Reports of quarterly monitoring shall be submitted to the DEQ regional office no later than the 10th day of April, July, October, and January.

Part I. Effluent Limitations And Monitoring Requirements.

A. Effluent limitations and monitoring requirements.

2. Noncontact cooling water.

During the period beginning on the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge noncontact cooling water. Samples taken in compliance with the monitoring requirements specified below shall be taken at outfall(s).

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	
	Average	Maximum	Minimum	Frequency	Sample Type
Flow (MGD)	NL	NL	NA	(4)	Estimate
pH (standard units)	NA	9.0 ⁽¹⁾	6.0 ⁽¹⁾	(4)	Grab
Total Residual Chlorine ⁽²⁾ (mg/l)	0.016	0.016	NA	(4)	Grab
Ammonia-N ⁽²⁾ (mg/l)	NA	NL	NA	(4)	Grab
Temperature (°C)	NA	(3)	NA	(4)	Immersion Stabilization

NL = No limitation, monitoring required

NA = Not applicable

⁽¹⁾ Where the Water Quality Standards (9 VAC 25-260) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.

⁽²⁾ Chlorine limitation and monitoring are only required where the source of cooling water is chlorinated. Ammonia monitoring is only required where cooling water is disinfected using chloramines.

⁽³⁾ The effluent temperature shall not exceed a maximum 32°C for discharges to nontidal coastal and piedmont waters, 31°C for mountain and upper piedmont waters, 21°C for put and take trout waters, or 20°C for natural trout waters. No maximum temperature limit applies to discharges to estuarine waters. For estuarine waters, nontidal coastal and piedmont waters, mountain and upper piedmont waters, and put and take trout waters, the effluent shall not cause an increase in temperature of the receiving stream of more than 3°C above the natural water temperature. For natural trout waters, the temperature of the effluent shall not cause an increase of 1°C above natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2°C per hour, except in the case of natural trout waters where the hourly temperature change shall not exceed 0.5°C. Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point-source discharge.

⁽⁴⁾ For a facility that was covered by the previous general permit, and reduced monitoring was granted and compliance demonstrated, monitoring frequency shall be 1/quarter. In all other cases, monitoring frequency shall be 1/month in the first year of permit coverage. If the first year results demonstrate full compliance with the effluent limitations and the permittee receives authorization from the DEQ regional office, monitoring frequency shall be reduced to 1/quarter. Should the permittee be issued a warning letter related to violation of effluent limitations, a notice of violation, or be the subject of an active enforcement action, monitoring frequency shall be reverted to 1/month, upon issuance of the letter or notice or initiation of the enforcement action and remain in effect until the permit's expiration date. Reports of quarterly monitoring shall be submitted to the DEQ regional office no later than the 10th day of April, July, October, and January.

Part I. Effluent Limitations And Monitoring Requirements.

A. Effluent limitations and monitoring requirements.

3. Storm water associated with industrial activity - storm event monitoring.

During the period beginning on the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge storm water associated with industrial activity which does not combine with other process wastewaters or noncontact cooling water prior to discharge. Samples taken in compliance with the monitoring requirements specified below shall be taken at outfall(s).

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Maximum	Minimum	Frequency	Sample Type
Flow (MGD)	NL	NA	1/Year	Estimate ⁽¹⁾
Total Petroleum Hydrocarbons ⁽³⁾ (mg/l)	NL	NA	1/Year	Grab ⁽²⁾
Total Suspended Solids (mg/l)	NL	NA	1/Year	Grab ⁽²⁾
Total Recoverable Iron (mg/l)	NL	NA	1/Year	Grab ⁽²⁾
pH (standard units)	NL	NL	1/Year	Grab ⁽²⁾

NL = No limitation, monitoring required

NA = Not applicable

⁽¹⁾ Estimate of the total volume of the discharge during the storm event in accordance with the Operation and Maintenance Manual.

⁽²⁾ The grab sample shall be taken during the first 30 minutes of the discharge. If during the first 30 minutes it was impracticable, then a grab sample shall be taken during the first hour of discharge, and the permittee shall submit with the Discharge Monitoring Report a description of why a grab sample during the first 30 minutes was impracticable.

⁽³⁾ Total Petroleum Hydrocarbons shall be analyzed using the Wisconsin Department of Natural Resources Modified Diesel Range Organics Method as specified in Wisconsin publication SW-141 (1995), or by EPA SW-846 Method 8015B (1996) for diesel range organics, or by EPA SW-846 Method 8270C (1996). If Method 8270C is used, the lab must report the combination of diesel range organics and polynuclear aromatic hydrocarbons.

4. All storm water samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Specific storm event data shall be reported with the Discharge Monitoring Report in accordance with Part II A.

5. Reports of annual monitoring shall be submitted to the DEQ regional office no later than the 10th day of January of each year.

6. A quarterly visual monitoring shall be performed and recorded in accordance with Part II D.

B. Special conditions.

1. There shall be no discharge of floating solids or visible foam in other than trace amounts.
2. Except as expressly authorized by this permit, no product, materials, industrial wastes, or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, or storage of raw or intermediate materials, final product, byproduct or wastes, shall be handled, disposed of, or stored so as to permit a discharge of such product, materials, industrial wastes, or other wastes to surface waters.
3. Vehicles and equipment utilized during the industrial activity on a site must be operated and maintained in such a manner as to minimize the potential or actual point source pollution of surface waters. Fuels, lubricants, coolants, and hydraulic fluids, or any other petroleum products, shall not be disposed of by discharging on the ground or into surface waters. Spent fluids shall be disposed of in a manner so as not to enter the surface or ground waters of the state and in accordance with the applicable state and federal disposal regulations. Any spilled fluids shall be cleaned up to the maximum extent practicable and disposed of in a manner so as not to allow their entry into the surface or ground waters of the state.
4. All washdown and washout of trucks, mixers, transport buckets, forms or other equipment shall be conducted within designated washdown and washout areas. All washout/washdown water shall be collected for recycle or treated prior to discharge.
5. Any waste concrete and dredged solids from the settling basins shall be managed within a designated area, and any wastewaters including storm water generated from these activities shall be collected for recycle or treated prior to discharge.
6. No domestic sewage discharges to surface waters are permitted under this general permit.
7. For geothermal or other system which discharges noncontact cooling water, the use of any chemical additives, except chlorine, without prior approval is prohibited under this general permit. Prior approval shall be obtained from the DEQ Regional Office before any changes are made to the chemical usage in the geothermal or other system. Requests for approval of chemical use shall be made in writing and shall include the following information:
 - a. The chemical additive to be employed and its purpose;
 - b. The proposed schedule and quantity of chemical usage, and the estimated concentration in the discharge;
 - c. The wastewater treatment or retention (if any) to be provided during the use of the additive; and
 - d. A Material Safety Data Sheet (MSDS) and available aquatic toxicity information for each additive proposed for use.
8. Within 180 days after the date of coverage under this general permit, the permittee shall develop an Operations and Maintenance (O&M) Manual for the permitted facility. The O&M Manual shall include procedures and practices for the mitigation of pollutant discharges and for the protection of state waters from the facility's operations. The manual shall address, at a minimum, operations and maintenance practices for the wastewater treatment process units and chemical and material storage areas, solids management and disposal procedures, temporary and long-term facility closure plans, testing requirements and procedures, recordkeeping and reporting requirements and the duties and roles of responsible officials.

The permittee shall implement the O&M Manual procedures and practices as soon as possible but no later than 12 months after the date of coverage under this general permit. The manual shall be kept on site at the permitted facility and shall be made available to the department upon request.

For a facility that was covered by the previous permit, an O&M Manual was required to be developed and implemented for that facility. Within 90 days after the date of coverage under this general permit, the existing O&M Manual shall be reviewed and modified, as appropriate, to conform to the

requirements of this permit. The existing O&M Manual shall continue to be implemented until the manual, if required, is revised and implemented.

9. If the concrete products facility discharges through a municipal separate storm sewer system to surface waters, the permittee shall, within 30 days of coverage under this general permit, notify the owner of the municipal separate storm sewer system of the existence of the discharge and provide the following information: the name of the facility; a contact person and phone number; nature of the discharge; number of the outfalls; and the location of the discharge. A copy of such notification shall be provided to the department.

10. The permittee shall ensure that all basins and lagoons maintain a minimum freeboard of one foot at all times except during a 72-hour transition period after a measurable rainfall event. During the 72-hour transition period, no discharge from the basins and lagoons shall occur unless it is in accordance with this permit. Within 72 hours after a measurable rainfall event, the freeboard in all basins and lagoons shall return to the minimum freeboard of one foot. Should the one-foot freeboard not be maintained, the permittee shall immediately notify the DEQ Regional Office, describe the problem and corrective measures taken to correct the problem. Within five days of notification, the permittee shall submit a written statement to the regional office of explanation and corrective measures taken. In order to demonstrate compliance, the permittee shall conduct daily inspections while the facility is in operation and maintain an inspection log. The inspection log shall include at least the date and time of inspection, the weather data including the occurrence of a measurable rainfall event, the printed name and the handwritten signature of the inspector, the freeboard measurement in inches, a notation of observation made, and any corrective measures, if appropriate, taken. The log shall be kept onsite and be made available to the department upon request.

11. For treatment systems which operate only in a "no discharge" mode, there shall be no discharge of pollutants to surface waters from these systems except in the case of a storm event which is greater than a 25 year-24 hour storm event. The operation of these systems shall not contravene the Water Quality Standards (9 VAC 25-260), as adopted and amended by the board, or any provision of the State Water Control Law.

12. The permittee shall notify the department as soon as he knows or has reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit if that discharge will exceed the highest of the following notification levels:

- (1) One hundred micrograms per liter (100 µg/l);
- (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
- (3) Five times the maximum concentration value reported for that pollutant in the permit application; or
- (4) The level established by the board in accordance with 9 VAC 25-31-220 F.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit if that discharge will exceed the highest of the following notification levels:

- (1) Five hundred micrograms per liter (500 µg/l);
- (2) One milligram per liter (1 mg/l) for antimony;
- (3) Ten times the maximum concentration value reported for that pollutant in the permit application; or
- (4) The level established by the board in accordance with 9 VAC 25-31-220 F.

13. All settling basins used for treatment and control of process wastewater and commingled storm water that were constructed on or after February 2, 1998, shall be lined with concrete or any other impermeable materials prior to commencing operation.

14. Treated wastewater may be used on site for the purposes of dust suppression. Dust suppression shall be carried out as a best management practice but not a wastewater disposal method. No ponding or surface runoff shall occur as a result of such activity.

15. Compliance reporting under Part I A.

a. The quantification levels (QL) shall be as follows:

Effluent Characteristic	Quantification Level
Chlorine	0.1 mg/l
Ammonia-N	0.2 mg/l

b. Reporting.

(1) Monthly Average. Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in Part I A shall be determined as follows: All concentration data below the QL listed in subsection 15 a of this subsection shall be treated as zero. All concentration data equal to or above the QL listed shall be treated as it is reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, for the month. This arithmetic average shall be reported on the DMR as calculated. If all data are below the QL then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the calculated concentration is <QL then report "<QL" for the quantity, otherwise use the calculated concentration.

(2) Daily Maximum. Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in Part I A shall be determined as follows: All concentration data below the QL listed in subdivision 15 a of this subsection shall be treated as zero. All concentration data equal to or above the QL shall be treated as reported. An arithmetic average of the values shall be calculated using all reported data, including the defined zeros, collected for each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the calculated concentration is <QL then report "<QL" for the quantity, otherwise use the calculated concentration.

(3) Any single datum required shall be reported as "<QL" if it less than QL listed in subdivision 15 a of this subsection. Otherwise the numerical value shall be reported.

Part II.
Storm Water Management.

A. Recording of results. For each discharge measurement or sample taken pursuant to the storm event monitoring requirements of this permit, the permittee shall record and report with the Discharge Monitoring Reports (DMRs) the following information:

1. The date and duration (in hours) of the storm event(s) sampled;
2. The rainfall measurements or estimates (in inches) of the storm event which generated the sampled discharge; and
3. The duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.

B. Representative discharge. When a facility has two or more exclusively storm water outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluent, the permittee may test the effluent of one of such outfalls and include with the DMRs an explanation that the quantitative data also applies to the substantially identical outfalls provided that the permittee includes a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluent. In addition, for each exclusively storm water outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g., low (under 40%), medium (40% to 65%) or high (above 65%)) shall be provided.

C. Sampling waiver. When a permittee is unable to collect storm water samples required in Part I A or other applicable sections of this permit within a specified sampling period due to adverse climatic conditions, the permittee shall collect a substitute sample from a separate qualifying event in the next period and submit these data along with the data for the routine sample in that period. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

D. Quarterly visual examination of storm water quality. The permittee shall perform and document a visual examination of a storm water discharge associated with industrial activity from each outfall, except discharges exempted below. The visual examination(s) must be made during daylight hours (e.g., normal working hours), at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December.

1. Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examination shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previous measurable (greater than 0.1 inch rainfall) storm event. The required 72-hour storm event interval is waived where the preceding measurable storm event did not result in a measurable discharge from the facility. The required 72-hour storm event interval may also be waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. If no qualifying storm event resulted in discharge from the facility during a monitoring period, visual monitoring is exempted provided that the permittee document that no qualifying storm event occurred that resulted in storm water discharge during that quarter. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term.

2. Visual examination reports must be maintained onsite with the pollution prevention plan. The report shall include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam,

oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

3. If the facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the examination data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (i.e., low (under 40%), medium (40 to 65%), or high (above 65%)) shall be provided in the plan.

4. When the permittee is unable to conduct the visual examination due to adverse climatic conditions, the permittee must document the reason for not performing the visual examination and retain this documentation onsite with the records of the visual examinations. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

E. Allowable nonstorm water discharges.

1. The following nonstorm water discharges are authorized by this permit provided the nonstorm water component of the discharge is in compliance with Part II E 2 below.

- a. Discharges from fire fighting activities;
- b. Fire hydrant flushings;
- c. Potable water including water line flushings;
- d. Uncontaminated air conditioning or compressor condensate;
- e. Irrigation drainage;
- f. Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with manufacturer's instructions;
- g. Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
- h. Routine external building wash down which does not use detergents;
- i. Uncontaminated ground water or spring water;
- j. Foundation or footing drains where flows are not contaminated with process materials such as solvents;
- k. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

2. Except for flows from fire fighting activities, the Storm Water Pollution Prevention Plan must include:

- a. Identification of each allowable nonstorm water source;
- b. The location where it is likely to be discharged; and
- c. Descriptions of appropriate BMPs for each source.

3. If mist blown from cooling towers is included as one of the allowable nonstorm water discharges, the facility must specifically evaluate the potential for the discharges to be contaminated by chemicals used in the cooling tower. The permittee must determine that the levels of such chemicals in the

discharges will not cause or contribute to a violation of an applicable water quality standard after implementation of the BMPs selected to control such discharges.

F. Releases of hazardous substances or oil in excess of reportable quantities. The discharge of hazardous substances or oil in the storm water discharge(s) from this facility shall be prevented or minimized in accordance with the applicable storm water pollution prevention plan for the facility. This permit does not authorize the discharge of hazardous substances or oil resulting from an onsite spill. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110 (1998), 40 CFR Part 117 (1998) or 40 CFR Part 302 (1998) occurs during a 24-hour period, the permittee is required to notify the department in accordance with the requirements of Part III G as soon as he has knowledge of the discharge. Where a release enters a municipal separate storm sewer system (MS4), the permittee shall also notify the owner of the MS4. In addition, the storm water pollution prevention plan required by this permit must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate. This permit does not relieve the permittee of the reporting requirements of 40 CFR Part 110 (1998), 40 CFR Part 117 (1998) and 40 CFR Part 302 (1998) or § 62.1-44.34:19 of the Code of Virginia.

G. Storm water pollution prevention plans. A storm water pollution prevention plan is required to be developed for the facility. The plan shall be prepared in accordance with good engineering practices, and shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Permittees must implement the provisions of the storm water pollution prevention plan as a condition of this permit.

The storm water pollution prevention plan requirements of this permit may be fulfilled by incorporating by reference other plans or documents such as an erosion and sediment control plan, a spill prevention control and countermeasure (SPCC) plan developed for the facility under § 311 of the Clean Water Act or best management practices (BMP) programs otherwise required for the facility provided that the incorporated plan meets or exceeds the plan requirements of Part II G 4. If an erosion and sediment control plan is being incorporated by reference, it shall have been approved by the locality in which the activity is to occur or by another appropriate plan approving authority authorized under the Virginia Erosion and Sediment Control Regulation, 4 VAC 50-30. All plans incorporated by reference into the storm water pollution prevention plan become enforceable under this permit.

1. Deadlines for plan preparation and compliance.

a. For a storm water discharge associated with industrial activity that is existing on or before the effective date of this permit, the storm water pollution prevention plan shall be prepared and implemented as expeditiously as practicable, but not later than 270 days from the date of coverage under this permit. For a facility that was covered by the previous permit, a storm water pollution prevention plan was required to be developed and implemented for that facility. Within 120 days after the date of coverage under this permit, the existing storm water pollution prevention plan shall be reviewed and modified, as appropriate, to conform to the requirements of this permit. The existing storm water pollution prevention plans shall continue to be implemented until a new plan, if required, is developed and implemented.

b. The plan for any facility where industrial activity commences after the effective date of this permit, and except as provided elsewhere in this permit, shall be prepared, implemented and provide for compliance with the terms of the plan and this permit on or before the date of submission of a registration statement to be covered under this permit.

c. In cases where construction is necessary to implement measures required by the plan, the plan shall contain a schedule that provides compliance with the plan as expeditiously as practicable, but no later than three years from the date of coverage under this permit. Where a construction compliance schedule is included in the plan, the schedule shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure.

2. Signature and plan review.

- a. The plan shall be signed in accordance with Part III K, and be retained on-site at the facility covered by this permit in accordance with Part III B.
- b. The permittee shall make the storm water pollution prevention plan, annual site compliance inspection report, or other information available to the department upon request.
- c. The director, or his designee, may notify the permittee in writing at any time that the plan does not meet one or more of the minimum requirements of this part. Such notification shall identify those provisions of the permit which are not being met by the plan, and identify which provisions of the plan require modifications in order to meet the minimum requirements of this part. Within 60 days of such notification from the director, or as otherwise provided by the director, the permittee shall make the required changes to the plan and shall submit to the department a written certification that the requested changes have been made.

3. Keeping plans current. The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to surface waters of the state or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Part II G 4 b of this permit, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity.

4. Contents of plan. The plan shall include, at a minimum, the following items:

- a. Pollution prevention team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water pollution prevention team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

- b. Description of potential pollutant sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

(1) Drainage. A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part II G 4 b (3) have occurred, and the locations of the following activities: fueling stations; vehicle and equipment maintenance and/or cleaning areas; loading/unloading areas; bag house or other dust control device, recycle/sedimentation pond, clarifier or other device used for the treatment of process wastewater, and the areas that drain to the treatment device, locations used for the storage or disposal of wastes; liquid storage tanks; processing areas; and storage areas. The map must indicate the outfall locations and the types of discharges contained in the drainage areas of the outfalls; and for each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of the chemicals; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(2) Inventory of exposed materials. An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative

description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of three years prior to the date of coverage under this general permit and the present; method and location of on-site storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of three years prior to the date of coverage under this general permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(3) Spills and leaks. A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of three years prior to the date of coverage under this general permit. Such list shall be updated as appropriate during the term of the permit.

(4) Sampling data. A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(5) Risk identification and summary of potential pollutant sources. A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and on-site waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, etc.) of concern shall be identified.

c. Measures and controls. Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(1) Good housekeeping. Good housekeeping requires the clean and orderly maintenance of areas that may contribute pollutants to storm waters discharges. Particular attention should be paid to areas where raw materials are stockpiled, material handling areas, storage areas, liquid storage tanks, and loading/unloading areas. The plan shall describe procedures performed to minimize the discharge of: spilled cement, aggregate (including sand and gravel), fly ash, settled dust, or other significant material in storm water from paved portions of the site that are exposed to storm water. Regular sweeping or other equivalent measures to minimize the presence of these materials shall be employed. The frequency of sweeping or equivalent measures shall be specified in the plan based upon a consideration of the amount of industrial activity occurring in the areas and the frequency of precipitation, but it shall be a minimum of once a week if cement, aggregate, kiln dust, fly ash or settled dust are being handled/processed. Where practicable, efforts must be made to prevent the exposure of fine granular solids (cement, fly ash, etc.) to storm water by storing these materials in enclosed silos/hoppers, buildings or under other covering.

(2) Preventive maintenance. A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and appropriate maintenance of such equipment and systems.

(3) Spill prevention and response procedures. Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate

personnel. The necessary equipment to implement a clean up should be available to personnel.

(4) Routine facility inspections. Facility personnel who are familiar with the industrial activity, the BMPs and the storm water pollution prevention plan shall be identified to inspect designated equipment and areas of the facility. Inspections shall be conducted while the facility is in operation and include, but are not limited to, the following areas exposed to storm water: material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, and truck wash down/equipment cleaning areas. The inspection frequency shall be specified in the plan based on a consideration of the level of industrial activity at the facility, but it shall be a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit. A set of tracking or followup procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained with the pollution prevention plan.

(5) Employee training. Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. A pollution prevention plan shall identify periodic dates for such training.

(6) Recordkeeping and internal reporting procedures. A description of incidents such as spills, or other discharges, along with other information describing the quality and quantity of storm water discharges shall be included in the plan. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(7) Sediment and erosion control. The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(8) Management of runoff. The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, wet detention/retention devices; or other equivalent measures.

d. Comprehensive site compliance evaluation. Qualified facility personnel who are familiar with the industrial activity, the BMPs and the storm water pollution prevention plan shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, in no case less than once a year. Such evaluations shall include the following:

(1) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

- (2) Based on the results of the evaluation, the description of potential pollutant sources identified in the plan in accordance with Part II G 4 b and pollution prevention measures and controls identified in the plan in accordance with Part II G 4 c shall be revised as appropriate within two weeks of such evaluation and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the evaluation.
- (3) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with Part II G 4 d shall be made and retained as part of the storm water pollution prevention plan as required in Part III B. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part III K.
- (4) Where compliance evaluation schedules overlap with inspections required under Part II G 4 c (4), the compliance evaluation may be conducted in place of one such inspection.
5. Special pollution prevention plan requirements:
- a. Additional requirements for storm water discharges associated with industrial activity from facilities subject to § 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) reporting requirements. Potential pollutant sources for which the facility has reporting requirements under EPCRA 313 must be identified in the summary of potential pollutant sources as per Part II G 4 b.
 - b. Additional requirements for salt storage. Storage piles of salt used for deicing or other commercial or industrial purposes must be enclosed or covered to prevent exposure to precipitation (except for exposure resulting from adding or removing materials from the pile). Piles do not need to be enclosed or covered where storm water from the pile is not discharged to surface waters or the discharges from the piles are authorized under another permit.

Part III.
Conditions Applicable To All VPDES Permits.

A. Monitoring.

1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.
2. Monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency unless other procedures have been specified in this permit.
3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.

B. Records.

1. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individuals who performed the sampling or measurements;
 - c. The dates and times analyses were performed;
 - d. The individuals who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain (i) records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, (ii) copies of all reports required by this permit, and (iii) records of all data used to complete the registration statement for this permit for a period of at least three years from the date of the sample, measurement, report or request for coverage. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the board.

C. Reporting monitoring results.

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to the department's regional office.
2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the department.
3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the department.
4. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to provide information. The permittee shall furnish to the department, within a reasonable time, any information which the board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water

Control Law. The permittee shall also furnish to the department upon request copies of records required to be kept by this permit.

E. Compliance schedule reports. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized discharges. Except in compliance with this permit, or another permit issued by the board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, for recreation, or for other uses.

G. Reports of unauthorized discharges. Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part III F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part III F, shall notify the department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of unusual or extraordinary discharges. If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the department within five days of discovery of the discharge in accordance with Part III I 2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

I. Reports of noncompliance. The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this subdivision:

- a. Any unanticipated bypass; and
- b. Any upset which causes a discharge to surface waters.

2. A written report shall be submitted within five days and shall contain:

- a. A description of the noncompliance and its cause;
- b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
- c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The board may waive the written report on a case-by-case basis for reports of noncompliance under Part III I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts III I 1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part III I 2.

NOTE: The immediate (within 24 hours) reports required in Parts III G, H and I may be made to the department's regional office by telephone or by fax. For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of planned changes.

1. The permittee shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

- (1) After promulgation of standards of performance under § 306 of Clean Water Act which are applicable to such source; or

- (2) After proposal of standards of performance in accordance with § 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with § 306 within 120 days of their proposal;

- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or

- c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. The permittee shall give advance notice to the department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory requirements.

1. Registration statements. All registration statements shall be signed as follows:

- a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation or (ii) the manager of one or more

manufacturing, production, or operating facilities provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes (i) the chief executive officer of the agency or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports, etc. All reports required by permits, and other information requested by the board shall be signed by a person described in Part III K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part III K 1;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and

c. The written authorization is submitted to the department.

3. Changes to authorization. If an authorization under Part III K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part III K 2 shall be submitted to the department prior to or together with any reports, or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Parts III K 1 or 2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to comply. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under § 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under § 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the

existing permit, unless permission for a later date has been granted by the board. The board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a permit. This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State law. Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by § 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part III U), and "upset" (Part III V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and hazardous substance liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of solids or sludges. Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass.

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III U 2 and U 3.

2. Notice.

a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least 10 days before the date of the bypass.

b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part III I.

3. Prohibition of bypass.

a. Bypass is prohibited, and the board may take enforcement action against a permittee for bypass, unless:

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been

installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The permittee submitted notices as required under Part III U 2.

b. The board may approve an anticipated bypass, after considering its adverse effects, if the board determines that it will meet the three conditions listed above in Part III U 3 a.

V. Upset.

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part III V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.

2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An upset occurred and that the permittee can identify the causes of the upset;
- b. The permitted facility was at the time being properly operated;
- c. The permittee submitted notice of the upset as required in Part III I; and
- d. The permittee complied with any remedial measures required under Part III S.

3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and entry. The permittee shall allow the director, or his designee, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit actions. Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permits.

1. Permits are not transferable to any person except after notice to the department. Except as provided in Part III Y 2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.

2. As an alternative to transfers under Part III Y 1, this permit may be automatically transferred to a new permittee if:

- a. The current permittee notifies the department at least 30 days in advance of the proposed transfer of the title to the facility or property;

- b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
- c. The board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part III Y 2 b.

Z. Severability. The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

ATTACHMENT F

Modified Example Registration Statement Transmittal Letter

Transmittal Letter
Concrete Products Facilities General Permit Registration Statement

Regional Letterhead

Facility Name
Address

ATTN: John Contact

RE: Registration for the General VPDES Permit for Concrete Products Facilities

Dear Mr. Contact:

General VPDES permit VAG11 for Concrete Products Facilities was adopted by the State Water Control Board on June 19, 2003; became effective on October 1, 2003; and was modified effective February 8, 2006 to include coverage for SIC Codes 3271 (concrete block and brick) and 3272 (concrete products, except block and brick). This general permit provides VPDES permit coverage to discharges from all qualified concrete products facilities that submit a registration statement and are approved for coverage.

Discharges already covered by the general permit VAG11, primarily those of ready-mixed concrete facilities (SIC Code 3273), will maintain their coverage until the expiration date of the general permit on September 30, 2008.

Individual VPDES permit holders or other concrete products facility owners must complete and submit the enclosed registration statement if they wish to be covered under this general permit instead of an individual permit. The registration must be submitted [**Choose One:** at least 180 days of the expiration date of an existing individual permit **OR** at least 30 days prior to commencing operation of a new process **OR** within X days*]. If your facility qualifies for the general permit, it is recommended that you obtain coverage in order to simplify requirements for having your process wastewater or storm water discharges permitted. [**Note: For non-permitted existing facilities, inform them of the requirement to obtain a permit, the consequences of discharging without permit coverage and set a time for submittal.*]

Instructions for completing the registration form are included in this package. The permit application fee for this general permit is \$600.00 and should be submitted in accordance with the attached fee form.

If you have any questions, please do not hesitate to contact us.

Sincerely,

Regional WPM Name
Water Permit Manager

ATTACHMENT G

**Modified Example Transmittal Letter for Issuing
General Permit Coverage**

Transmittal Letter
Concrete Products Facilities General Permit

Regional Letterhead

Facility Name
Address

ATTN: John Contact

RE: Coverage under the General VPDES Permit for Concrete Products Facilities VAG11_____

Dear Permittee:

We have reviewed your Registration Statement received on _____, and have determined that activities of the concrete products facility identified in the Registration Statement are hereby covered under the referenced general VPDES permit. Your coverage under this general permit became effective as of the date of this letter. The enclosed copy of the general permit contains the applicable effluent limitations, monitoring requirements and other conditions of coverage.

A Discharge Monitoring Report (DMR) for your [**Choose all that apply:** process wastewater / noncontact cooling water / storm water associated with an industrial activity] [is / are] included with the permit. [The / Each] DMR specifies the applicable effluent limitations, monitoring requirements and monitoring frequency (i.e., monthly, quarterly or yearly) contained in the permit. A DMR is to be completed for each permitted outfall and you will be responsible for obtaining additional copies of the DMR[s]. The DMR[s] [is / are] due on the tenth of the month following monitoring. For quarterly monitoring, the DMR[s] should be submitted by the tenth of January, April, July and October. For yearly monitoring, the DMR[s] should be submitted by the tenth of January 10. In accordance with the general permit, you are required to submit the DMR[s] to:

[Name of Regional Office and address]

Please note that Part I B.8 of the general permit requires that you develop and maintain an Operation and Maintenance (O&M) Manual for the permitted facility. [**For a new facility or facility previously covered under an individual permit:** This part of permit requires that you develop an O&M Manual within 180 days of permit coverage and implement the O&M Manual procedures within 12 months of permit coverage.] **OR** [**For a facility previously covered under this general permit only:** This part of permit requires that you review and modify, as appropriate, the existing O&M Manual within 90 days of permit coverage. The existing manual shall continue to be implemented until the manual, if required, is revised and implemented.]

Also note that this general permit constitutes coverage of your storm water discharges as required by the storm water regulations for your industry. Part II of the general permit pertains to

these storm water discharges. [**For a new facility or facility previously covered under an individual permit:** This part of the permit requires that you develop and implement a Storm Water Pollution Prevention Plan within 270 days of permit coverage.] **OR** [**For a facility previously covered under this general permit only:** This part of permit requires that you review and modify, as appropriate, the existing Storm Water Pollution Prevention Plan within 120 days of permit coverage. The existing plan shall continue to be implemented until a new plan, if required, is developed and implemented.]

The general permit will expire on October 1, 2008. The conditions of the permit require that you submit a new registration statement at least 180 days prior to that date if you wish continued coverage under the general permit, unless permission is granted to submit a new registration statement on a later date. Permission can not be granted to submit the registration statement after the expiration date of the permit.

If you have any questions, please do not hesitate to contact us.

Sincerely,

Regional WPM Name
Water Permit Manager